E. T. A. Hoffmann’s tale The Nutcracker and the Mouse King (1816) contains several wonderful, one may even say, magical, events. First, it celebrates the birthday of a man who died in his early thirties, then came back from the dead for a couple of days, and then disappeared from view completely, while still managing to stay alive, somewhere (possibly, behind the clouds), for almost two thousand years. To commemorate him, the grownup characters of Hoffmann’s story buy toys for their children and tell them that these gifts come from that man, who brings goodies to hundreds of thousands of well-behaving youngsters of Europe, and who, incidentally, has now become an infant again.¹ So, what we have here is a gift-bearing, omnipresent, two-thousand-year-old infant.

¹ E.T.A. Hoffmann refers to Christ now as “der liebe Heilige Christ” (as in, “Es waren ihnen aber auch gewiss, dass dabei der liebe Heilige Christ mit gar freundlichen frommen Kindesaugen hineinleuchte und dass, wie von segensreicher Hand berührt, jede Weihnachtsgabe herrliche Lust bereite wie keine andere” [77; emphasis added] and “das Christkind” (as in, “Ein heller Schein streifte an der Wand hin, da wussten die Kinder, dass nun das Christkind auf glänzenden Wolken fortgeflogen zu anderen glücklichen Kindern . . . ” [78]). Different translations render that
Another wonderful event involves a nutcracker, perhaps delivered by that energetic infant. Shaped like a little man with a large mouth, the nutcracker comes alive at night and commandeers a regiment of toy soldiers to fight an army of mice led by their king: a large seven-headed mouse. The battle is witnessed by a seven-year-old girl who then reports what she has seen to her parents and to her younger brother, Fritz.

One would expect that this event should not strike the parents as very strange because they may already be familiar with its broad outlines, again, through stories involving the two-thousand-year old infant. When that infant was still a man, he was reported to have successfully fought basilisks, dragons, and many-headed serpents. Somewhere in his eight-hundreds, however, he lost interest, so by the eleventh century, the job of dragon-trampling was assumed by St. George. St. George’s exploits were commemorated by many famous artists. One of these artists was Albrecht Dürer (see figure 1), who used to live in the same city of Nuremberg as do several characters in Hoffmann’s tale. This is to say that an appearance of a seven-headed monster, right around the birthday of the infant, and its subsequent defeat by the very Nutcracker whom the infant may have providently insinuated into the household, should not raise the parents’ eyebrows.

differently, ranging from “holy Christ” to “infant Christ.” Robert Manheim’s acclaimed version has it as “Christ Child” (3) throughout.

2 Paul Stephenson, 179–182.

3 Dürer was a particular favorite of Hoffmann’s. In fact, at the time of his death, Hoffmann was working on a story about Dürer, called “Der Feind,” which was never finished and published posthumously in 1823.
Yet eyebrows are raised. Far from being honored to learn that this year’s installation of the sacred battle against evil is unfolding in their living room, Dr. Stahlbaum and his wife vehemently deny their little girl Marie’s eyewitness report. First, together with the family physician, they attribute it to her “wound fever,” for, in the process of assisting Nutcracker in his fight against the Mouse King, Marie has broken “the glass of the toy cabinet” and “cut her arm very badly” (35). When, after several days of staying in bed and, presumably, having gotten over her delirium, Marie still persists in her account, her mother is “horrified” and father moved to ask, “Where on earth does the child get such crazy ideas?” (62) When Marie tells her parents about her subsequent journey to the “Land of Dolls,” on which the victorious Nutcracker has taken her, her mother calls it “a long, beautiful dream” and insists that Marie now “must really forget all that nonsense” (95).

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4 For a discussion of the Mouse King’s resemblance to “the dragon representing evil incarnate in the Book of Revelations (12: 3),” see Blamirez, position 21.
No amount of evidence can make the parents change their mind. When they see signs of a large, inexplicable mice infestation, all that the mother can say is, “I can’t understand how all those mice could get into our living room” (64). When Marie produces tangible proof of her adventure—the seven tiny crowns that used to belong to the Mouse King—the parents keep urging her to tell where they have really come from. When Marie desperately turns to the one man who could confirm her story, her Godfather Drosselmeier—and begs him to tell her parents that her Nutcracker is, in fact, his nephew, “young Mr. Drosselmeier from Nuremberg, and that he gave [her] the little crowns”—the father responds by bringing out the big guns:

Dr. Stahlbaum looked severely at his daughter and said: ‘Look here, Marie. You’re to forget about this foolishness once and for all. And if I ever again hear you saying this ugly simpleminded Nutcracker is Judge Drosselmeier’s nephew, I’ll throw Nutcracker out of the window and all your other dolls as well, including Mistress Clara.’ (97)

“Of course,” Hoffmann observes dryly, faced with such an irrefutable argument, Marie has no choice but to fall silent.

Here is the question that I want you to consider. Why is Marie’s story treated as utterly unreasonable (i.e., “crazy” and “foolish”) while the story of the man who has come back from the dead is not? Or, at the very least, why can’t Marie’s family afford her narrative some of the same easygoing pragmatic attitude that they afford to the narrative of a two-thousand-year old gift-bearing infant, which they treat as true or ignore, depending on their current pedagogical needs?
The answer to this question may seem obvious. One can say, for instance that it is much more unreasonable for a child to believe in the story of Nutcracker battled the Mouse King than it is for her to believe in the story of Christ battling dragons, turning back into a baby, and distributing gifts two thousand years after his death, if only because the story of Christ is a familiar cultural narrative, deeply embedded within a broad variety of communal practices. What I hope to show, however, is that, while cultural familiarity certainly matters, yet another factor is at play in deciding which story will be treated as contingently plausible and which will not, hence marking the child who believes in the latter as unreasonable (or else, unusually imaginative).

Emerging from studies by cognitive psychologists and anthropologists, this factor has to do with social functions of reason, and it sheds new light not just on the strong emotional response of the older Stahlbaums to Marie’s story, but also on the long critical tradition of thinking of Marie as a quintessential Romantic child, whose lively imagination outstrips that of her philistine parents. The proponents of the social view of reason emphasize its dialogic and interactionist nature, which, I believe, makes this approach of particular interest to literary theorists who seek to integrate literary criticism with cognitive science.

I have divided my essay into five parts. Part one, “Coexistence Thinking,” draws on work of cognitive psychologists to show that, in principle, the adult protagonists of Hoffmann’s tale could engage with Marie’s story in ways other than pronouncing it foolish and crazy. Part two, “Naïve Skepticism and Metacognitive Limitations,” suggests that Marie’s stubborn insistence on the reality of Nutcracker and the Mouse King is well in keeping with what developmental psychologists today would expect from children of her age group. In part three, “Social Functions of Reason,” I turn to recent work of cognitive evolutionary anthropologists and psychologists,
Hugo Mercier and Dan Sperber, who consider reasons “constructs” intended “primarily for social consumption” (127), and I show that Marie’s parents are subjected to a very particular kind of social pressure when they are called to respond to their daughter’s account of her adventures. Part four, “Metacognitive Instability and Critical Imagination,” shows how literary scholars have attempted to come to terms with the two seemingly incommensurable realities depicted in the story (i.e., that of Marie and that of her parents), first, by idealizing Marie’s “Romantic” imagination, and, more recently, by treating Nutcracker as the foundational text of the children’s fantasy genre. Both of these approaches, I suggest, are deepened and complemented by the cognitive perspective. Finally, the concluding, fifth part, “But They Didn’t Have that Word!” discusses the legitimacy of using recent research by cognitive scientists for examining psychology and interpersonal dynamics of early nineteenth-century fictional characters.

1. Coexistence Thinking

Let us start by taking a closer look at how members of the Stahlbaum’s household integrate certain types of magical thinking into their daily routine. The Nutcracker and The Mouse King begins with Marie and Fritz, locked out of the parlor, which their parents are decorating for Christmas, trying “to guess what their parents” and Godfather Drosselmeier “would give them this time.” Fritz asserts that he likes “the things Mama and Papa give . . . a lot better,” because the children “can keep them and do what [they] like with them, while the elaborate mechanical toys that their Godfather makes for them are so special that their parents take them away and lock them up (2). As Marie and Fritz assure each other that their parents are
well aware of what specific items they want this year, their “big sister Louise” feels it is incumbent on her to remind them that,

[It] was always the Christ Child who, by the hands of their dear parents, brought children things that would give them true enjoyment, since he knew what those would be better than the children themselves. So . . . instead of hoping and wishing for all sorts of things, they should wait quietly like well-behaved children for whatever the Christ Child would bring.”

Although Fritz grumbles, in response, that he would still like “a chestnut horse and some hussars,” neither he nor Marie have any problem combining natural and supernatural explanations of the origins of their gifts, or, to be more precise, of the origins of the joy that they would experience from their gifts. Although only a moment ago, they were saying that they like what their parents give them more than what their Godfather does, and were proudly recalling with what skill and tact they had conveyed to the adults what they really wanted (“Marie also remembered how Mama had smiled at her being so delighted with her doll Gretchen’s little parasol”), now they are perfectly willing to attribute their impending pleasure in their parents’ gifts to the blessings of the Christ Child:

So the children knew that their parents had bought them all sorts of lovely presents, and were busy imagining them, but they were just as certain that the
Christ Child was looking on with tender loving eyes, and that Christmas gifts, because he had blessed them, gave them more pleasure than any others. (3)

Developmental psychologists have a particular term to describe this kind of thinking: they call it “coexistence.” As Christine Legare and her colleagues put it, “both natural and supernatural explanations frequently operate within the same mind to explain the very same event or phenomenon.” In this view, “supernatural explanations do not always appear early in development; nor are they primitive or immature ways of thinking that are suppressed over the course of development. Instead, like natural explanations, they are constructed and elaborated through socialization and cultural learning and may be founded on earlier intuitive explanations” (781).

Marie, Fritz, and Louise have certainly been socialized by their parents to integrate magic and realism in their thinking about Christmas. We see a bit of that socialization at work when the parents, who had toiled the whole day on decorating the tree and preparing the gifts (children could hear “murmuring and shuffling and muffled hammer blows in the locked rooms”), now throw open the doors, take “their children by the hand” and say: “Come in, come in, dear children, and see what the Christ Child has brought you” (3). Nobody, including readers, seems to find strange that the same phenomena—that is, gift-giving and the particular pleasure derived from some gifts but not others—are given two very different ontological explanations, which function parallel to each other or are flexibly combined when an occasion calls for it.

For our present purposes, what is most interesting about coexistence thinking is that it is more prevalent in adults than in children. Traditionally, it has been thought that “young children gradually abandon a belief in supernatural causation and instead acquire a more objective,
rational, or scientific appreciation of cause and effect.” Recent studies, however, have shown that coexistence thinking grows stronger with age and that adults exhibit it more consistently than children. 5 “The endorsement of allegedly competing epistemologies is commonplace in both Western and Non-Western contexts,” and not just in such “emotionally charged domains” as the origin of species, illness, and death, but also in “accounts of procreation, wrongdoing and marriage.” Converging “developmental data from diverse cultural contexts,” both within “highly educated, industrialized communities” and “highly traditional, non-industrialized communities,” demonstrates that “natural explanations involving natural or scientific causes and supernatural explanations involving divine or religious causes are used by the same individuals to interpret the same to-be-explained phenomena.” When “faced with different explanatory frameworks—including those that are potentially in conflict with one another—adults and children might endorse both, either by recruiting them in different contexts, by ignoring potential contradictions, or by finding ways to combine and coordinate them” (Legare et al, 780, 781, 789). 6

What forms does coexistence thinking take in the elder Stahlbaums? On the one hand, they know exactly where the Christmas gifts come from, so it is reasonable to assume that, when they are telling their children that “the Christ Child has brought” them, they are taking part in an elaborate cultural ritual rather than accurately reporting what they know about the origins of the

5 In general, adults tend to be more supernatural in their thinking than children. For a discussion, see Woolley and Ghossainy, 1498, as well as Astuti and Harris, “Understanding Morality” and Astuti et al., Constraints.

6 As Woolley and Ghossainy observe, “different aspects of people’s situations will favor or elicit different ways of thinking” (1497). See also Subbotsky, Magic, and Harris, Trusting.
gifts. On the other hand, were someone to ask them about what Marie, Fritz, and Louise think about where the gifts come from, the parents would be likely to attribute to their children some form of coexistence thinking, perhaps acknowledging, for instance, that while they believe that the Christ Child has brought them, they also know that the parents did the actual choosing, buying, and arranging of the presents. Though seemingly incompatible, these beliefs would not be considered so. Instead the Stahlbaums would come up with some explanation that would reconcile them—not unlike the explanation that their children came up with (above) about the Christ Child conferring a special blessing on the gifts brought by the parents (as opposed to those, for instance, made by Drosselmeier).

Moreover, it probably wouldn’t take very long to get the parents to display more coexistence thinking, were one to ask them a couple of follow-up questions about the exact ontological status of the two-thousand-year old infant. Unless they would pronounce themselves staunch atheists and materialists—which is, clearly, not a viable alternative for characters in a Hoffmann storyworld—the older Stahlbaums would have to come up with explanations that would draw on both natural and supernatural elements, “by ignoring potential contradictions, or by finding ways to combine and coordinate them.”

Here is where it all leaves us in respect to my initial question, which is why Marie’s story about the Mouse King is treated as unreasonable while the story of the two-thousand-year-old infant is not. While I am not yet in a position to answer that question (I hope to do so in part 3), what we have established so far is that the older Stahlbaums do not lack a broad explanatory frame that would allow them to domesticate a supernatural event. Coexistence thinking is always an option, so if Marie’s parents refuse to engage in it (for instance, by naturalizing some parts of her story while treating other parts as a Christmas miracle), they must have good reason for it.
What enables Marie to persist in her belief in the reality of her adventures in the face of her parents’ strong disapproval and their insistence that it was either a delirious vision or a dream? Putting aside, for a moment, traditional literary-critical explanations (i.e., that Marie is a uniquely imaginative child, a fitting icon for the Romantic age, and an embodiment of Hoffmann’s own contempt for philistinism), we can ask what other children of her age would have done in her place. To see if Marie’s behavior is unusual, especially for a seven-year-old, we turn to research from developmental psychology which focuses on the development of metacognitive abilities in young children.

To begin with, coexistence thinking explains only so much when it comes to children’s reality judgment. Although they can and do engage in such thinking, it does not mean that they are ready to treat any fantastic event as real, as long as they can come up with a combination of natural and supernatural explanations to account for it. In fact, young children, be they from New Jersey or Madagascar, tend to display “a strikingly large amount” of skepticism and “assign reality status much more sparingly than one might expect,” although as they grow older, their skepticism becomes somewhat weaker. This is to say that a typical seven-year old is not likely to rush to adapt what we may call a “Romantic” outlook—which privileges her imagination over the grown-ups’ realism—unless she has good reasons to do so.

Considerations that are likely to influence her perspective include her own first-hand evidence; verbal testimony of trusted others; context (for instance, “instruction in church or
Sunday school has the potential to confer reality status on events that might otherwise seem fantastical”); and the quality of her emotional arousal (when stirred by an “angry or frightening event,” children’s “reasoning about reality status errs on the side of dismissing real events as fictional,” while happy or neutral events may be judged as “real regardless of their fantastic content”).

How are these considerations weighted in relation to each other? Individual differences certainly play a role. Some children tend more “toward initial credulity and others toward initial skepticism.” These initial differences can then be reinforced by paying selectively more or less attention to, for instance, contexts and the testimony of others, as opposed to personal experience and emotional charge.

But here is another factor that may underlie the strong skeptical stance generally espoused by children between three and nine. Children of that age are less able to reflect on the limitations of their knowledge. (This is not to say adults never overestimate their knowledge—of course they do!—merely that the gradual maturation of metacognitive abilities is an important developmental phenomenon.) What it means is that when children are asked to estimate the reality status of improbable and impossible events, they are likely to judge it as low or high depending on whether or not they have experienced such events themselves. For instance, when they are told about a radically novel entity—such as a real or made-up animal which they have never encountered before—they tend to remain highly skeptical and disregard the testimony of adults who claim that it exists.

It may be “perplexing” to an adult that “a young child could believe that his or her knowledge of the world is complete enough to deny the existence of anything new,” for, it “would seem that young children would understand that there are many things that exist in the
real world that they have yet to experience.” Yet, as “intuitive as this seems, it appears not to be the case.” The ability to rely less on one’s own knowledge and experience and use, instead, “a wider range of strategies for assessing reality status, including, for example, seeking more information, assessing contextual cues, and evaluating the quality of the new information,” is something that does not come online until later in development (Woolley and Ghossainy, 1497-1505).

What we have in Hoffmann’s tale is the same dynamic of skepticism, only reversed to accommodate Marie’s particular expertise. As a naïve skeptic, the seven-year-old Marie is less likely to be swayed by the testimony of her parents if it contradicts her own first-hand experience, especially given the sensory richness and narrative coherence of that experience. So many factors corroborate her account, from her memory of the active participation in the battle with the mice army (and the arm wound she incurred in the process), and the gift of the seven little crowns, to Drosselmeier’s “Story of the Hard Nut” (which provides a compelling account of the motivations of both Nutcracker and the Mouse King7), that she would have to be an unusually metacognitively precocious child to disregard all that evidence in favor of the testimony of her parents. This is to say that she would have to exhibit a truly remarkable insight into how fallible her judgement of reality can be. That we as readers, apparently expect her to possess that kind of insight—and thus pronounce her a particularly imaginative, “Romantic” child when she does not—demonstrates, primarily, that we may not be aware of the important differences between metacognitive abilities of children and grownups.

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7 For a discussion of the connections between the main tale and the story within the story, see Blamirez, positions 18-20.
Somewhat ironically, it may also be the case that her family’s frequent references to the magic Christ Child have provided Marie with a broader context for believing in the reality of some supernatural occurrences. For, you may recall that, when Louise reminds Marie and Fritz that it is the magical Christ Child who brings them their gifts (for he knows what gifts “would give them true enjoyment . . . better than the children themselves”), Marie sits “deep in thought”—apparently more impressed than her brother, who keeps muttering that, “all the same,” he knows what he wants for Christmas (3). That the elder Stahlbaums then expect that Marie would attend selectively to the cultural contexts of various improbable and/or impossible events— that is, that she would believe the story about the miraculous infant (for which she only has circumstantial evidence), yet would disbelieve the story of Nutcracker (for which she has overwhelming personal evidence)—shows them to be rather typical parents. They assume, as we would (and as I myself do as a parent), that a child should be properly humble about the status of her knowledge about the world and trust her parents’ judgements implicitly, a humbleness that would certainly feel gratifying to adults but would hardly be developmentally realistic.

To sum up, Marie’s resistance to her parents’ argument is not different from what any other child of her age would do faced with the same kind of evidence. Her skeptical view of their opinion reflects metacognitive limitations typical for this developmental stage, for she yet has to learn to question various aspects of her memory, knowledge, and experience. Note that by this I do not mean to say that Marie’s parents are correct and that she has dreamt up Nutcracker’s

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8 But see Deena Skolnick and Paul Bloom’s “What Does Batman Think,” as well as their “The Intuitive Cosmology of Fictional Worlds,” for a discussion of children’s capacity to keep different fictional worlds apart.
battle with the Mouse King—merely that we should not overly romanticize Marie’s imagination. Given the immediate evidence of her senses, the background tale of the Hard Nut provided by her Godfather Drosselmeier, and the overall magical context of Christmas, her insistence on the truth of her story may be perfectly reasonable.

What is reasonable for Marie, however, is not so for the older Stahlbaums. For, what is at stake for them is not the actual ontological status of the nutcracker toy: they could have easily sidestepped around that issue the same way they sidestep around other potentially thorny issues involving magic/religion, that is, through coexistence thinking. But it so happens that the older Stahlbaums are typically called on to respond to Marie’s story in the presence of other people, and that puts a different kind of pressure on their own metacognitive capacities. To see how their reactions are shaped by that pressure, we turn to the work of cognitive psychologists and anthropologists who study social functions of reason.

3. Social Functions of Reason

To make sense of Dr. and Mrs. Stahlbaum’s predicament, I rely on the framework developed by Hugo Mercier and Dan Sperber in their book, *The Enigma of Reason* (2017), which considers reason in the context of mindreading (i.e., attribution of mental states to oneself and others) and metacognition (i.e., capacity to evaluate one’s mental states). Specifically, Mercier and Sperber argue that our production and evaluation of reasons is shaped by our need to 1) convince others of the truth of our opinion, 2) decide if others’ opinion is worth adopting, and 3) manage reputational costs involved in these processes. According to this “interactionist approach, the normal conditions for the use of reason are social, and more specifically dialogic,”
while outside “of this environment, there is no guarantee that reasoning acts for the benefit of the reasoner” (247). Reasons, then, are “constructs” intended “primarily for social consumption”:

[Reasons] are constructed by distorting and simplifying our understanding of mental states and their causal role and by injecting into it a strong dose of normativity. Invocations and evaluations of reasons are contributions to a negotiated record of individuals’ ideas, actions, responsibilities, and commitments. This partly consensual and partly contested social record of who thinks what and who did what for which reasons plays a central role in guiding cooperative or antagonistic interactions, in influencing reputations, and in stabilizing social norms. (127)

Here is what is at stake in thinking of reasons as social—that is, relational, dialogic, and interactional—rather than as internal, immanent, and abstract. First, it alerts us to the appealing but ultimately false story that we tell to ourselves about our reasoning. For, we tend to assume that we reason and then act, whereas, in reality, this process may be reversed: we act and then look for reasons to justify our actions in the eyes of others. In general, we are not capable “to bring to consciousness reasons that have guided us unconsciously” (114). Worse than that, we are “systematically mistaken in assuming that we have direct introspective knowledge of our mental states and of the processes through which they are produced.” Even in the case “of seemingly conscious choices, our true motives may be unconscious and not even open to
introspection; the reasons we give in good faith may, in many cases, be little more than rationalizations after the fact” (115).

Second, this perspective on reason emphasizes the importance of debates, arguments, and other contexts in which one has to submit her reasons for external scrutiny and is, in turn, asked to critically evaluate other people’s reasons. The “backward procedure” through which we infer our reasons from our actions “is not designed for objective thinking, let alone intellectual discovery,” because it has an inbuilt confirmation bias or “myside bias” (219). While this bias works well for us when we think of how to persuade others (which involves, to begin with, persuading ourselves), it works against us when we attempt to objectively evaluate our own opinion. But this bias is not at play when we scrutinize reasons given by others who hope to convince us. On the contrary, we approach those with a critical eye, which means that there is a greater chance for objective critique and, hence, genuine advance in thinking.

Finally, let us not lose track of how these two functions of reason—“to justify oneself in the eyes of others, and to evaluate the justifications of others (often critically)”—are implicated in managing one’s reputation:

Thinking about good reasons for their actions is something that people often do proactively, anticipating that they may be called upon to explain or justify themselves. The minute you have engaged in a course of action that may have reputational costs—and sometimes even before, when you are merely considering it—a different mental mechanism may start working. Its function is to manage

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9 See also Hogan, *Sexual Identities*, 232.
your reputation and for this, to provide an explanation that will justify your behavior. (124)

In light of the imperative to manage reputational costs, it is important that Marie’s parents are always forced to respond to her stories about Nutcracker and the Mouse King in the presence of other people. When Marie first informs her mother that there “had just been a big battle between the dolls and the mice,” the family physician, Dr. Wendelstern, is in the room, and, following his cue (“a meaning look”), her mother attempts to humor her, by saying that “the mice are all gone, and Nutcracker is safe in the toy cabinet.” Then her father comes in, feels Marie’s pulse, hears of her story, and talks to the doctor about her “wound fever” (35). Similarly, when Marie first explains to her assembled family that Nutcracker is Drosselmeier’s nephew and “a prince, or rather a king,” her mother and Louise laugh, but Drosselmeier, who is also present, remains “unsmiling.” While we (and Marie) interpret his gravity as a sign that he takes her story seriously, it appears that Marie’s father experiences it differently, for it is then that he first becomes cross with her and asks, “Where on earth does the child get such crazy ideas?” (62). Finally, when Marie asks Drosselmeier to confirm that his nephew, aka Nutcracker, gave her “the little crowns,” and Drosselmeier betrays her, muttering “Stuff and nonsense!,” Dr. Stahlbaum gets really angry and threatens that unless she forgets “about this foolishness once and for all,” he will throw Nutcracker and all her other dolls “out of the window” (97).

While we have no way of knowing for sure what Marie’s parents, and especially her father, might have said had there been no strangers in the room on any of those occasions, I do not think that the presence of these strangers is a coincidence. It changes the social dynamics of those scenes and creates a very particular kind of pressure on the father. Because Dr.
Wendelstern and Judge Drosselmeier are there, Dr. Stahlbaum’s priorities shift from engaging with his daughter to managing his and his family’s reputation in their community. Any attempt to take Marie’s story seriously or even to pretend to take it seriously (e.g., by deploying coexistence thinking) would open the possibility that he and his wife would be reported as believing “stuff and nonsense,” or else, encouraging their children to believe it, or, at the very least, allowing their children to treat other members of their community disrespectfully (as Marie allegedly does when she seems to be claiming, according to her father, that Judge Drosselmeier’s nephew is as “ugly” and “simpleminded” as a nutcracker). In other words, it is in anticipation “that they may be called to explain or justify themselves” (Mercier and Sperber, 124), and that their reputations would suffer because no good justification appears to be immediately forthcoming, that Dr. Stahlbaum describes his daughter’s behavior as delirious, crazy, and foolish.

Keep in mind, too, that a reaction that may have started as a response to anticipated reputational cost can then take on a life of its own. This is the dynamic that Mercier and Sperber describe when they say that we do not have direct introspective knowledge of our motives and that “the reasons we give in good faith may be . . . little more than rationalizations after the fact.” If it is indeed the case that the real reason that Dr. Stahlbaum, in his initial conversation with Dr. Wendelstern, pronounced Marie’s story a product of her “wound fever” was that he was concerned about his reputation in the community, he is not likely to be aware of that reason. What this means is that he may now sincerely believe that he has always considered his daughter’s story nonsensical and that this is why he is now becoming increasingly angry about her recalcitrant repetitions of that story. Thinking that his daughter is willfully defying him (as opposed to being aware that he is scared of incurring a reputational cost) leaves smaller and smaller space for engaging in any kind of coexistence thinking (which, after all, calls for a
certain kind of creativity and mental flexibility), and no amount of physical evidence (i.e., the mice infestation, the seven little crowns) can make him change his mind.

Hence the reason that reasonable (i.e., not delirious, crazy, or foolish) children think that the two-thousand-year-old infant is real while the Mouse King is not, is that believing in the first would (in the eyes of their parents) maintain the parents’ reputation in the community, while believing in the second would (again, in the eyes of those parents) damage it. That the parents are mistaken—at least in the case of Judge Drosselmeier, who actually shares their daughter’s belief in the world of Nutcracker and the Mouse King—is, of course, deeply ironic, but hardly surprising. After all, evolution had never bestowed upon us the capacity to read each other’s minds correctly, only with the capacity to think that others have mental states and to act on our fallible inferences of what those mental states may be.

A central conflict of The Nutcracker and the Mouse King thus could be said to arise from a clash between two different aspects of metacognition. On the one hand, we are presented with the compelling sensibility of a child whose developmentally-appropriate metacognitive limitations make her privilege her memories, sensory impressions, and logical deductions over the verbal testimonies of her parents. On the other hand, we have the compelling-in-its-own-right perspective of the parent, whose (not necessarily conscious) anticipation of incurring reputational costs leads him to question—quite sincerely, too, as far as he is concerned—his daughter’s sanity. And then, of course, there is also Drosselmeier who maintains a precarious foothold in both worlds, now confirming the truth of Marie’s story, now throwing her to the wolves. For he, too, has reputational costs to manage, as Dr. Stahlbaum indirectly reminds him, when, upon hearing Drosselmeier agree with Marie, he feels his pulse, suggests that the Judge is “suffering from cerebral congestion,” and offers to write him out “a prescription” (62).
4. Metacognitive Instability and Critical Imagination

Where does all this leave the reader, or to be more precise, literary critic reading the story? I see two main payoffs of adding the cognitive-psychological perspective on Hoffmann’s tale to other literary-critical readings. First, it enriches our understanding of the characters’ motivation, because it shows that they act in response to very different metacognitive challenges. Marie sticks to the truth of her lived experience, as a typical seven-year-old would, while her father attempts to manage his reputation by pronouncing Marie unreasonable and refusing to listen to her story. Both try to make the best of the hard spots that their creator put them in, and neither can appreciate the problem faced by the other. In fact, they can’t appreciate their own problems either, for, the father is not likely to realize that he says what he says because of the presence of strangers, and Marie is not likely to realize that she lacks the fully-developed cognitive machinery for questioning the reality of her lived experience.

In addition to highlighting the particular psychological predicaments of the characters, talking about metacognition in relation to *The Nutcracker and the Mouse King* also allows us to understand better the trajectory of its critical reception. Briefly, this trajectory can be described as moving away from the romanticized view of Marie and recategorizing the genre of the tale. Let us consider each of them in turn, first on its own, and then from the “cognitive” perspective.

Hoffmann’s tale used to be read in the context of the romantic “idealization of imagination and childhood,” informed by the Rousseauian “cult of sensibility,” and representing a backlash against what was seen as the preceding century’s emphasis on moral didacticism in education. In this reading, Marie’s philistine parents are not capable of sharing her marvelous visions because they are blinkered by their rationalism and/or fatally deficient imagination.
A critique of this view, voiced by such scholars as Alan Richardson and Jeanette Sky, emphasizes that the notion that children “have an elevated imagination [was] a cultural construct,” serving specific ideological needs of the Romantics:

Alan Richardson has argued that those who urged the importance of fairyland in forming the minds of children were in fact tending towards conservative views on social and political affairs. They had turned away from their youthful radicalism towards the conservatism that would mark their later careers. The Romantics' idealization of imagination and childhood was therefore perhaps less an act of liberation, and more a conservative reaction to the radical ferment of the 1790s with its unprecedented upsurge in literacy and a hunger for ideas demonstrated by the popularity of political pamphlet literature. What the so-called moralists were urging was educational literature that would help children become rational individuals. What the Romantics proposed in return was a literature that turned its back on reality and engaged in a religious and quasi-mythological sacralisation of child and imagination. (Sky, 366)

Perhaps particularly important for our present purposes is the critical insight that “the idea of the child was more important for the Romantics than the real child itself.” Imagination made this ideal child impervious to political manipulation, and, as such, “naturally resistant to both radical and conservative indoctrination alike.” Hence, “the efforts by Romantics like

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10 See Alan Richardson, “Wordsworth, Fairy Tales,” 40. See also Richardson’s Literature, Education, and Romanticism.
Wordsworth and Coleridge to reinforce the fairy tale in opposition to the more educational literature that flourished in the late eighteenth and early nineteenth century can actually be seen as a reaction against an informed and politically engaged lower-class readership” (Sky 371).

From the cognitive perspective, this view of the child as naturally shielded from ideological indoctrination is extremely fascinating. For, on the one hand, it is not altogether wrong. As we have just seen, according to developmental psychologists, metacognitive limitations can make the child between the ages of three and nine privilege her experience and knowledge over the testimony of adults. In this respect, the child may, indeed, be somewhat insulated from their manipulation. On the other hand, to idealize this stage in the child’s cognitive development and to sacralize the special quality of imagination that presumably underlies it, does mean to ignore the “real child.” Worse yet, treating this “liberating” imagination as something to aspire to, can, in practice, translate into locking politically vulnerable (due to race, gender, class, and age factors) populations into “assumptions of infantilism and even primitivism” (Sky 368). As a political move, it can thus be particularly insidious because it taps, intuitively, into a real cognitive phenomenon (i.e., children’s metacognitive immaturity), which it misinterprets to serve specific ideological agendas.

You can see, based on just this example, how insights from cognitive science (here, research into children’s metacognitive development) can complement and deepen the existing literary-historical perspective (here, the critique of some aspects of Romantics’ view of childhood and imagination). Still, excited as I am about this case of interdisciplinary synergy, I do not want it to be taken to mean that it is up to cognitive science to validate or invalidate this or that critical interpretation. Instead, I want you to note that when a work of fiction foregrounds metacognitive instability—which is to say, challenges its characters’ and readers’ capacity to
evaluate their own mental states—readers will continue seeking ways of resolving this instability.\textsuperscript{11} Different cultural and historical contexts could make some resolutions more immediately appealing than others, but it is not clear that any one of them would ever decisively settle the question and dissipate the metacognitive tension.

Emphasizing the protagonist’s unusual—childish and/or romantic—imagination is one way of dealing with this tension. Changing the generic optics through which we view the story is another. Moreover, the two can peacefully coexist. In the case of Nutcracker and Mouse King, even though the tendency to read it as a Romantic fairy tale for adults never completely went out of fashion, another reading has become possible with the increasing cultural prominence of the fantasy genre.

Thus, speaking of the origins of fantasy, “which has become one of the key genres of children’s literature,” Emer O’ Sullivan points out that it “was founded in Germany with E. T. A. Hoffmann’s Nußknacker und Mäusekönig,” even if “its subsequent development took place in other countries” (i.e., Denmark, England, and Sweden). In fact, it was not until 1949, with the German translation of Astrid Lindgren’s Pippi Långstrump, that, “for the first time since the Romantic era,” there was “a favorable climate for the reception and creation of fantasy for children in Germany,” which led to “a boom in this genre by German authors such as Michael Ende and Cornelia Funke” (“Comparative,” 194).\textsuperscript{12}

\textsuperscript{11} See Ellen Sposky’s discussion of “the interface of cultural change and cognitive possibilities” (43), particularly in the context of generic adjustment.

\textsuperscript{12} For an account of a somewhat different generic genealogy, see Jack Zipes’s Relentless Progress. As Zipes argues, Hoffmann wrote “disturbing fairy tales that we might today designate
Note that readers well versed in the fantasy genre are not likely to consider Harry Potter’s or Percy Jackson’s sojourns in various magical worlds as evidence of their vibrant imaginations. By the same token, when J. K. Rowling’s and Rick Riordan’s ordinary adults are shown to lack access to the alternative universes of the young protagonists and sometimes literally cannot see amazing events taking place before their eyes, we do not explain it by their philistinism and imaginative deficiency. There is simply no need for us to question the characters’ powers of perception in order to vindicate our own.

And so we remain comfortably anchored in the reality that allows the respective worlds of muggles and wizards, and of humans and (demi)gods to exist parallel to each other, without roughing up our “metacognitive self-confidence” (Mercier and Sperber, 66). This is to say that while Hoffmann may have been “a founding father of children’s fantasy” (O’Sullivan, Comparative, 26), not many later-day practitioners of the genre remained committed to the metacognitive instability animating his tale.

as tales of magic realism that celebrated the utopian potential of art and the artist. His unique style and approach to fairy tales has been carried on well into the twenty-first century as can be seen in Aimee Bender’s two collections of startling short stories, ‘The Girl in the Flammable Skirt’ and ‘Willful Creatures’” (130).

And if they are imaginatively deficient philistines, as are, for instance, the Dursleys, it is a reflection on them and not on their status as muggles.

For a discussion of anchoring, see Scullion and Treby, 46.

For an important analysis of Hoffmann’s aesthetics in the context of the “Schlegelian concept of elevation” see Scullion and Treby. As they point out, Friedrich Schlegel urged writers and
5. But They Didn’t Have that Word!

Throughout this essay, I have been unabashedly psychologizing little Marie and her parents. In fact, I seemed to all but imply that had Mrs. Stahlbaum brought her daughter into a university lab for an experiment conducted by a developmental psychologist today, she would fit right in with other seven-year old “subjects,” answering questions about the reality status of this or that novel animal and, inadvertently, revealing her metacognitive limitations.

Now, how anachronistic is that? Not only do I conveniently forget that Marie is not a real child but a fictitious construct, who cannot have any cognitive limitations, much less reveal them, but I also talk about her metacognitive ability, even though the word metacognition did not even exist in 1816. Its first recorded use, according to the OED, was in 1972. Ought I not, at

artists to “‘hover in the middle (in der Mitten schweben) on the wings of poetic reflection” in order to maintain a state of creative balance between spirit and matter. . . . Hoffmann was ever receptive to and well informed about contemporary aesthetic debate. In *The Serapion Brothers* (1819–1821), for example, Brother Theodor, one of the main contributors to aesthetic dialogue, describes poetic inspiration as follows: ‘I think that the bottom of the ladder to heaven on which one wants to climb up into higher regions must be grounded in life ... If, having climbed higher and higher, he [the writer or artist] then finds himself within a fantastic magical realm, he will come to believe that this realm too is part of his life, and that this realm is actually the most wonderful part of it.’ (vol. 4, p. 721)” (43).

16 See https://www-oed-com.ezproxy.uky.edu/view/Entry/251844?redirectedFrom=metacognitive#eid
least, to limit my discussion of Marie’s so-called psychology to terms and concepts that Hoffmann and his contemporaries were conversant with?

These two objections to cognitive-literary approaches are still sometimes voiced by literary critics, which is why I will conclude my essay by addressing them. To start with the first objection, cognitive literary scholars have no quarrel with the notion that fictional characters are narrative constructs whose “reality” is a mere illusion. Still, one can’t help noticing that this illusion is what makes both literary-critical and classroom conversations possible. As Andrew Elfenbein observes,

Literary scholars assume that characters are not real people and that the questions appropriate to ask about them are not the same ones that we might ask about real people. Yet no matter how often we stress such a point, both students in literature classes and many critics find that it never fully takes hold. For all our efforts, readers persist in treating literary characters as if they were people they had met. (59)

The reason that we persist in treating literary characters as if they were people we had met, is that we can’t helping using the same cognitive mechanisms (i.e., mindreading adaptations) to make sense of actions of fictional characters that we use when we make sense of actions of flesh-and-blood people. On some level, these adaptations do not distinguish between the two: as soon as they register behavior, they start churning up representations of mental states (i.e., thoughts, feelings, and intentions) that may have plausibly caused that behavior.
To keep constantly reminding oneself that it is all an illusion (as in: “Marie stops talking about Nutcracker because she is afraid that her father would throw her dolls out the window; but, wait: not really! Marie can’t be ‘afraid’ because she doesn’t really exist, she is a fictitious construct! So the reason this construct stopped ‘talking’ about Nutcracker is because, had she been a real girl and had her father been a real man, and had he threatened her that way, that’s what that real girl would have felt, but as this Marie is not a real girl, she clearly cannot be afraid”) would make the process of reading about just as fun as I have just made it sound.

Attributing mental states to fictional characters is thus what makes reading fiction, and talking about it, possible. One key difference between doing that on your own, as opposed to in a classroom or in a literary-critical essay, is that the latter contexts encourage us to go beyond mental states of fictional characters. That is, as scholars and teachers we are expected (and expect our students) to attribute mental states not just to characters, but also to narrators, to actual and implied authors, to variously historically situated readers, as well as to living and dead literary critics and philosophers. We may ask, for instance, what would this or that luminary think about this or that aspect of Hoffmann’s tale? What would Viktor Shklovsky say/think about it? What would Freud? What would Wittgenstein? What would Eve Kosofsky Sedgwick?

As I have argued elsewhere, when we ask our students to consider such questions, it may seem that we encourage them to move away from treating fictional characters “as if they were people they had met” and train them instead to see a work of fiction as a historically situated artifact that uses a variety of narrative techniques to engage with ideological, aesthetic, and psychological agendas—techniques that may come into sharper focus if we consider them via conceptual frameworks developed by various classical and modern thinkers. And train them we
do. Make no mistake, however: The only way by which we can achieve this is by expanding the circle of entities whose minds we read as if they were real people.¹⁷

Let us now turn to the second potential objection, which is that we cannot have a meaningful conversation about the limitations of Marie’s metacognitive capacity or about her parents’ coexistence thinking, because, back in 1816, those concepts did not exist, which implies—so this objection would go—that the phenomena that these terms describe did not exist either. To quote Elfenbein again,

[Cognitive-literary] investigations open themselves to an easy charge of anachronism: since most psychological findings derive from participants who postdate [the past centuries], we cannot know if those findings apply to earlier periods. Yet literary scholars routinely apply approaches and insights honed in the twentieth- and twenty-first century academy to works written in earlier periods. Nervousness about the use of cognitive science is an arbitrary invocation of rigor that misrecognizes the field’s enabling anachronisms. Also, there is no reason to decide a priori that contemporary psychological findings are irrelevant to the past. If it is wrong to assume that there is no difference between now and then, it is equally wrong to assume that there are no continuities either; assertions of historical difference do not guarantee truth any more than do ones of continuity.

(168)

¹⁷ Most of this paragraph comes from Zunshine, “Cognitive Alternatives.” See also Zunshine, “Who Is He” and The Secret Life.
In fact, as Patrick Colm Hogan has argued, to increase “ecological validity” of cognitive literary criticism, we should make a point of reaching to literary texts from “other historical periods and cultures.” Although there may be “great enthusiasm” in literary studies today to read “literary works in relation to theories that were or are contemporary with those works,” such texts are “usually just the sort of project that lacks independent value for cognitive research.” For instance, if a scholar interested in memory takes up a late-twentieth century novel that explicitly draws on a particular neuroscientific account of memory, this novel “probably does not tell us anything new about memory, beyond the account given in its source.” It cannot even be said to “converge’ with cognitive research, since it actually derives from that research” (25).

In deciding whether a work of literature is theoretically significant for a cognitivist investigation one should thus consider “at least two factors”:

First, that significance is contingent on the work’s independence from the theoretical and empirical studies with which one seeks to synthesize it. Second, its significance is in many ways proportionate to the degree to which it affects readers or viewers. The durability of a work suggests that it has represented a human condition in a way that is emotionally and cognitively affective for readers or viewers in different contexts and with different backgrounds. [This] does not mean that it is necessarily accurate. But its inaccuracies themselves may suggest something about human emotional and cognitive response. (25)
In contrast, Hogan observes, we would be “hardly justified in concluding anything from an ineffective work or work whose effectiveness may be a function of ephemeral factors,” which can range from the work’s topical references to contemporary scientific research to its particularly deft handling of current political preoccupations.

This is why we are better off, as researchers, focusing on “emotionally and cognitively affecting” texts that are epistemologically independent—that is, removed in space or time—from contemporary psychological findings. The processes that are at work in such texts “are largely unselfconscious, a matter of implicitly understanding patterns in human relations and conveying that implicit understanding representationally, which is to say, through the depiction of situations that manifest the patterns—usually in a heightened or more salient form than we would encounter in everyday life” (26).

In other words, Hoffmann did not need twenty-first century cognitive-evolutionary insights into metacognition and reputation management to intuit that a respectable paterfamilias may become defensive and angry when faced with (what he experiences as) social pressure, and that he would rather pronounce his daughter’s ideas “crazy” and threaten to throw away her toys, than reach out for a type of coexistence explanation that he and his family might have happily adapted in more relaxing circumstances. Both Marie’s insistence on the truth of her lived experience and her father’s insistence on her “foolishness” ring true to us—and we explain those respective behaviors by enlisting research in cognitive psychology. But, then, those behaviors also rang true to early nineteenth-century audiences, and they explained them through conceptual frameworks available to them, which is to say, by evoking the unfettered imagination of the child and the hopeless philistinism of the parent. Literature, as Blakey Vermeule puts it, “is so
powerful because it eats theories for breakfast,”¹⁸ and that includes theories originating in Rousseauian/Romantic outlook and in cognitive-psychological research. We can hope to gain a better understanding of cognitive foundations underlying our social interactions, but keep in mind that writers had gotten there first.

To return, then, to this essay’s title, children may very well be put in circumstances in which it feels reasonable to them to think that Nutcracker is alive and Mouse King is real. But then, their parents, too, can be put in circumstances in which it feels reasonable to them to pronounce their children’s stories crazy and foolish and forbid repeating them. Taking our clue from Mercier and Sperber, who emphasize the interactionist, dialogic approach to reason, we begin to see the predicament of Hoffmann’s characters, particularly that of the older Stahlbaums, in social rather than ontological terms. Is the Mouse King real? Who knows? But one’s peers and neighbors surely are.

Works Cited


