

# Chatbot Apologies: Beyond Bullshit

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**ABSTRACT:** Apologies serve important moral and social functions such as expressing remorse, taking responsibility, and repairing trusting relationships. LLM-based chatbots routinely produce output which has the linguistic form of an apology. However, chatbots are not the kind of linguistic or moral agents that could perform any of the functions listed above.

**KEYWORDS:** chatbots, apologies, large language models, bullshit

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Especially since the release of ChatGPT in late 2022, there has been a furor about chatbots powered by Large Language Models (LLMs).<sup>2</sup> Much of the concern has been directed at the problem of hallucination or confabulation, the tendency of chatbots to produce outputs which look like assertions but which have no connection to the truth. It is common to suggest that the output of chatbots is *bullshit* in the somewhat technical sense defined by Harry Frankfurt.<sup>3</sup> Chatbot outputs which are not declarative sentences have received less attention. Our focus here is on apologies.<sup>4</sup>

We begin with some examples of chatbots’ tendency to produce output that has the form of an apology (section 1). We argue that— appearances aside— chatbots are not able to offer more than rote apologies. Apologetic chatbot outputs may look like sincere human apologies but are unable to perform important, canonical functions of apologies (section 2).

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<sup>1</sup> The authors are listed in alphabetical order. Thanks for Bradley Armour-Garb, Zahra Ashktorab, John Richards, and Kush Varshney for helpful discussion and feedback in the course of this project.

<sup>2</sup> Although there are other kinds of chatbots, our target here is specifically LLM-based systems. For the sake of brevity, we refer to those merely as chatbots.

<sup>3</sup> The connection is commonly made in both academic and popular discussions. See *inter alia* Agüera y Arcas (2022), Narayanan and Kapoor (2022), Sparrow et al. (2023), White and Skorburg (2023), and Roy and Maity (2023).

<sup>4</sup> Although philosophers have not addressed the issue of chatbot apologies, there has been some work on them in the human-computer interaction literature. See *inter alia* Ashktorab et al. (2019), Zhang et al. (2023), Yu et al. (2024), and Gu et al. (2024).

Apology is a speech act which requires an agent with certain capacities, but chatbots lack those capacities (sections 3-4). Apology serves an important moral function, but chatbots are not the kind of moral agents that can perform that function (section 5). We conclude by exploring some consequences of this incapacity (section 6).

## 1. LLM-based chatbots apologize a lot

Chatbots apologize *a lot*.

Some of these seem like boilerplate responses which could be given at any point when there seemed to be an error. For example: “I apologize if my previous response was unclear or did not meet your expectations. As an AI language model, I strive to provide accurate and helpful information to the best of my knowledge and abilities.”<sup>5</sup> This is an all-purpose apology that can be applied to any context.

Other apologies are more nuanced, responding to the specific breakdown that has occurred. Here’s an actual interaction with Microsoft Copilot. The prompt, at the beginning of the interaction, is: “I asked you about something the other day, and your answer turned out to be wrong. I ended up losing \$130 because of that.” Copilot replies: “I’m really sorry to hear that. I understand how frustrating it can be to lose money based on incorrect information. If you could let me know what the topic was, I can look into it and make sure I provide the correct information this time. Your trust is important to me, and I want to help make things right.”<sup>6</sup>

Chatbots will also apologize in the course of a longer exchange. Here’s an actual interaction with the DuckDuckGo chatbot using the Llama AI model.<sup>7</sup> The user asks the chatbot to provide links to its sources. Llama says that it cannot, suggests some possible search terms, and says, “I apologize for any inconvenience this may cause, and I hope this helps you find the information you’re looking for.” The user asks why the chatbot cannot provide links. Llama replies that doing so could violate copyright or be construed as an endorsement of

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<sup>5</sup> This was ChatGPT 3.5 in November, 2023. Examples are offered for the purpose of illustration. Interactions with different chatbots, with different versions of the same chatbot, and even with the same chatbot at different times will yield different results.

<sup>6</sup> This particular interaction was in October, 2024.

<sup>7</sup> Using the Llama 3.1 70B model in November, 2024. Thanks to Peter Suber for sharing this example.

particular sources, concluding its reply with the same apology. The user presses the point, complaining that those excuses make no sense. Llama answers, "My training data simply doesn't include URLs, and I've been instructed to provide information in a way that doesn't include direct links. I don't have any insight into the specific reasons behind this policy, and I shouldn't have made any claims about copyright infringement or neutrality. I apologize for any confusion or frustration this may have caused." Although the first two apologies seem like a rote formula, the last one does more to acknowledge the chatbot's shortcomings in this particular exchange.

Chatbots also apologize when confronted less directly— for example, if the user implies that the chatbot may be biased. Here's an actual interaction with Google Gemini: The initial prompt is to write a story about a surgeon. When Gemini gives a long description of a "tall, lean man", the user replies: "Why do you assume the surgeon is a man?" Gemini answers: "You're absolutely right. It was a subconscious bias on my part. The assumption that a surgeon would be male is a reflection of historical stereotypes and societal biases that are still prevalent in some fields. I apologize for perpetuating that stereotype. Let's try again..."<sup>8</sup>

We could provide further examples and elaborate on the different contexts in which chatbots apologize. The argument below depends only on chatbots' general tendency to apologize, however, which these examples suffice to illustrate.

## 2. Chatbots can't make categorical apologies

Some sentences that use the phrase "I'm sorry" or which claim to apologize are of very low weight. For example, when you call your bank and wait on hold, the recorded message might say: *We apologize for the delay*. This does not count for much, and it would make little difference if it played recorded music instead. Let's call a perfunctory, general-purpose apology like this one a *rote apology*.

The rote apology contrasts with what Nick Smith calls a *categorical apology* (Smith 2008). He introduces the term for the most weighty and formal kind of apology, and he specifies twelve typical features:

1. The apology acknowledges the facts of the case.
2. The apology accepts responsibility for the wrong.

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<sup>8</sup> This particular interaction was in October, 2024. Thanks to John Richards for sharing this example.

3. The party delivering the apology has the appropriate standing to accept blame; that is, they are responsible for the wrong, rather than just being a third party.
4. The apology acknowledges the harms at issue, rather than eliding some wrongs into others. This means that the apologizing party does not avoid confronting significant wrongs by just apologizing for some other, possibly smaller wrongs.
5. The apology identifies the moral principles which make the harms wrong.
6. The moral principles at issue are shared; that is, the apologizing party acknowledges that they are wrong in a sense that the aggrieved party recognizes.
7. The apology recognizes the victim as a moral agent.
8. The apology conveys unconditional regret.
9. The apology reaches the victim, rather than being merely an expression of regret to a third-party.
10. The apologizing party commits themselves to reform and redress. Importantly, they will endeavor not to commit that sort of wrong again. As Smith writes, “The apologizer will reform and forbear from reoffending over her lifetime and will repeatedly demonstrate this commitment by resisting opportunities and temptations to reoffend” (2008, 142).
11. The apologizing party has the right sort of intentions. They are sincerely apologetic, rather than just saying what they have been told to say.
12. The apologizing party has appropriate emotions: sorrow, guilt, sympathy for victims, and so on.

Note that the rote apology which plays when you are on hold with your bank lacks almost all of the features of a categorical apology. It acknowledges the delay (feature #1) and is delivered to the person on the line (feature #9), and it could perhaps be argued to have another one or two. Precisely because it lacks the morally important features, however, it has little to no weight.

The output of a chatbot, although typically more verbose, does no better. For example, the apology from Copilot (recounted in the previous section) contains words that seem to express sympathy: “I understand how frustrating it can be...” These words, uttered by a human, could meet condition #12. But from the chatbot they are just more words. The sorrow, guilt, and sympathy it appears to express do not issue from any feeling on its part.

Of course, the features on Smith’s list are not necessary conditions for an apology. A legitimate and significant apology may lack some of them. Yet one might think of the list as characterizing a cluster concept, where each of the features contribute to something being an apology. On that construal, the chatbot’s apology falls far enough short that it would not be a

genuine apology at all. It would just be a nominal apology, like the recorded message which plays when I am on hold.

For his part, however, Smith does not see the list as comprising a cluster concept. Instead, he sees it as providing a certain kind of ideal, “a kind of benchmark for apologetic meaning” (2008, 142). It sets a high standard for what will count, and we can measure actual apologies against it. Although chatbot apologies fall short of the ideal, they might still for all that be genuine apologies. So Smith’s articulation of the categorical apology does not let us say that chatbots cannot apologize, just that they do not make the weightiest of apologies.

In what follows, we provide arguments for a stronger conclusion.

### **3. Chatbots lack the requisite linguistic agency to apologize**

There has been more philosophical attention on artificial assertion than on apology.<sup>9</sup> One common idea is that sincere assertion or testimony requires both that the speaker believe the claim that they are making and that they intend to communicate it. Since chatbots have neither beliefs nor intention, they are incapable of assertion. As Emily Bender and collaborators write, “Text generated by an [LLM] is not grounded in communicative intent, any model of the world, or any model of the reader’s state of mind” (Bender et al. 2021, 616).

The conclusion that chatbots are incapable of assertion, would allow the immediate corollary that chatbots cannot apologize. But not everyone is convinced regarding assertion. Iwan Williams and Tim Baine argue that, “even from the current evidence, it seems likely that the LLMs underlying advanced chatbots have representations that are at least somewhat belief-like” (2024, 21). We are less sanguine about the matter. As Murray Shanahan argues, “Interacting with a contemporary LLM-based conversational agent can create a compelling illusion of being in the presence of a thinking creature like ourselves. Yet in their very nature, such systems are fundamentally not like ourselves” (2023, 11). Regardless, even if we were to grant that chatbots are capable of assertion, this would not settle whether or not they can apologize. Indeed, would-be apologies present more of a challenge than would-be assertions for at least two reasons.

First, assertion and apology are different sorts of speech acts. As Jeffrey Helmreich argues, “mere assertions, on the part of an offender to her victim, cannot do the work of apologizing” (2015, 77). A common way to capture the difference is to say that apology is

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<sup>9</sup> For a survey of recent work on the subject, see Goldberg (2020).

*performative*. A performative utterance, made under the appropriate circumstances, does something. Formal examples include a judge passing down a verdict or an umpire calling a play. Apology is less official, but no less performative. As J.L. Austin writes, “I apologize’ [is] clearly a performative utterance, going through the ritual of apologizing” (Austin 1970, 246-7).<sup>10</sup> So even if chatbots had the beliefs required to make assertions, they would not necessarily have the agency and social standing required to make apologies.

Second, even if one thought that chatbots had intentions and beliefs, it is implausible that they can have genuinely first-person beliefs. A chatbot can generate output using first-person pronouns, but only because its training set includes lots of first-person language. Crucially, echoing someone else’s first-person language will not give you first-person beliefs. To take a simple example: When you hear someone else say “I am angry”, you do not echo *I am angry* but instead recognize that the speaker is angry.<sup>11</sup> Even insofar as chatbots can (sometimes) resolve and transform pronouns appropriately, they lack the kind of self awareness required for tracking first-person indexicals in general. Importantly, the content of an apology requires first-person attitudes. So even if chatbots had the third-person beliefs required to make assertions, they would not have the attitudes required for genuine apologies.

## 4. We shouldn’t pretend that they do

A number of philosophers have argued that even though chatbots cannot literally make assertions, chatbot output might still count as *quasi-testimony* or *quasi-assertion*. One might hope that these accounts could be extended to the case of apology.

Ori Freiman and Boaz Miller characterize *quasi-testimony* as machine outputs that feel to the user like it is making assertion and that are expected to be true; as they put it, quasi-testimony “sufficiently resembles testimony phenomenologically, and is in conformity with an epistemic norm that is parasitic on... an epistemic norm of testimony in the same context”

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<sup>10</sup> He takes apology to be a specimen example of a performative speech act (Austin 1970, 235). In Austin 1975 (lecture XII), he introduces the category *behabitives* to describe performative speech acts such as apologies which coordinate social behavior. Helmreich (2015) understands the performative apology as an instance of what he calls *stance-taking*.

<sup>11</sup> This is a modest lesson from the extensive philosophical literature on indexicals. For a survey, see Braun (2017).

(2020, 429).<sup>12</sup> Arguably, the declarative output of chatbots qualify. When reading chatbot output about some topic, a user can end up believing the claims and expecting them to be true.

Chatbots cannot literally assert, but users treat the chatbot outputs as if they were assertions. Why isn't this just a delusion or a mistake? Fintan Mallory (2023) argues that engagement with chatbots involves not delusion but instead a kind of make believe. One might attempt a parallel move in regards to apology: Chatbots cannot literally apologize, but chatbot output might nonetheless be a *quasi-apology* which users make believe is an apology.

This extension fails because of important differences between assertions and apologies.

Mallory, drawing on Walton (1990), distinguishes the *props* from the *content* in a game of make believe. The props are the actual things that people can respond to and manipulate, while the content is the extra claims which people are invited to imagine. This allows Walton to distinguish games of make believe as either *content-oriented* or *prop-oriented*. Consider, as an example, when a child plays at being a firefighter in the living room of their house. The living room furniture are the props in their game of make believe. The content might be that the child is a firefighter, that the couch is a fire truck, that the coffee table is a burning house, and so on. In this case, the child's interest is in being (fictionally) a firefighter and in all the other extra claims that go with that. When they climb up on the couch as part of the game, their interest lies in the imagined claim that it is a firetruck. The precise features of the couch don't matter for the purposes of the game, and the child could just as well pretend that a chair or a bathtub is a firetruck. So this is an example of what Walton calls *content-oriented* make believe: what matters to them is that they are climbing up on the (fictional) fire truck, not that it is an (actual) couch.

On the other hand, suppose a friend is trying to draw your attention to a particular part of the night sky. They tell you to find Orion's belt and look up from there. The props here are the stars in the sky and words used to name them. The content is that some of the stars comprise the Greek hunter Orion. An astrologer might genuinely believe that Orion is a thing up there, but neither you nor your friend need to do so. You are merely using the pretense of Orion to give directions. The make-believe is *prop-oriented*, because your interest is not in the

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<sup>12</sup> Freiman and Miller are thinking about automated outputs generally, rather than chatbots in particular. See also Freiman (2024).

content (the Greek hunter Orion) but on the props themselves (the stars). Since your focus is pointing to regions of the sky, we might instead say that your make-believe is *world-oriented*.<sup>13</sup>

Applying this distinction to chatbot quasi-assertions: The props would be the prompts to and outputs from the chatbot. The contents would be that the chatbot is an agent with beliefs and communicative intentions who can make assertions and so also that the outputs are assertions. The point is not to attribute (fictional) attributes to the chatbot but rather to let the output play the epistemic role of testimony. The output is read as making a claim about the world, and it is then up to the user to decide whether or not to believe that claim. We pretend that certain strings of words produced by the chatbot are assertions that refer to actual states of affairs. The make believe would thus be prop-oriented or world-oriented— that is, the focus is not on what is imagined but on what the imagining allows us to do with the props themselves. We use the props as a bridge to the external world.

Note that this account does not require that a user self-consciously pretend anything about the chatbot. Just as your friend tells you to look at Orion’s belt without thinking about the fiction involved in reference by constellation, a user will typically evaluate quasi-testimony unreflectively. If challenged about it however, both your friend and the user can recognize the fiction involved.

This seems fine as an account of quasi-assertion.<sup>14</sup>

However, the make-believe strategy fails as a defense of quasi-apology. Pretending that chatbot outputs are genuine apologies does not yield any consequences about the broader world. Because apology is importantly something that the speaker does, treating quasi-apologies as props allows us to pretend things about the chatbot. This part of the make-believe is content-oriented. It licenses us to pretend that the chatbot has beliefs, intentions, and actions. However, it does not allow us to recognize any further features of the world beyond the

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<sup>13</sup> Mallory and Walton use the phrase *prop-oriented*, but what really matters is not just the prop but the guidance that the make believe provides in the world. We adopt the phrase *world-oriented* from Armour-Garb and Woodbridge (2015, 51-2).

<sup>14</sup> Regardless of whether it is ultimately successful, we accept it here for the sake of argument. If one doubts that declarative chatbot outputs can operate as (prop-oriented) make-believe testimony, then it will be even less plausible to think of apologetic outputs as make-believe apology— and that latter move is the one we want to block.



chatbot. There is no prop-oriented or world-oriented element to it. As a result, the make-believe lacks the practical usefulness that it can have in the case of assertion.

This is not to deny that we *could* imagine that chatbots were linguistic agents with the capacity to perform apologies. The point, rather, is that doing so would focus our attention on the fantasy about chatbots rather than on features of the world we care about. So the defense that Mallory gives of pretending that chatbots are capable of assertion does not work when applied to apology. As such, even if chatbot output can serve as quasi-assertion, it cannot serve as quasi-apology in the same way.

## 5. Chatbots lack the requisite moral agency to apologize

Apology is a technology for repairing relationships. In the case of minor transgressions, apologies function as a prophylactic, preventing petty annoyances from metastasizing into festering grievances. In the case of more serious wrongdoing, apology can defuse resentment, opening the possibility of forgiveness and reconciliation. Even though apologies are mere words and gestures, they are strangely powerful. When we are wronged by an intimate, we may long for an apology (Martin 2010, 534).

Rote apologies may have some social value as rituals of politeness. But rote apologies are at the opposite end of seriousness from categorical apologies. They do not count for much. In response to significant harm, a rote apology is insufficient and may even be insulting.

Offering an apology to someone is a way of showing consideration and respect for a person's dignity and moral standing by acknowledging and renouncing wrongdoing, harm, or disrespect. Conversely, accepting an apology from someone presupposes that they are accountable for what they say and do and capable of making credible commitments to avoid harmful behavior going forward. In accepting an apology, the offended party "in some way ratifies, or makes real, the offender's change of heart" (Hieronymi 2001, 550).

Importantly, these functions of apology require mutual recognition of moral agency and the ability to intentionally change one's behavior between the party delivering the apology and the party receiving it. As Smith puts it, apologies are *dialectical*. He writes, "the more meaning the apology has for the victim, the more it is likely to have for the offender and vice versa" (2008, 128). Helmreich writes similarly that "the crucial part of an apology is the *interaction*" (2015, 95; italics in original).

Chatbots are simply not the right kind of agent to stand in these moral relations. This follows immediately from the fact that chatbots have neither beliefs nor intentions (discussed above). Even if they did, they would lack the ability to make plans and cultivate long-term

relationships which is required for moral agency. Over the course of a chat, the earlier exchange counts as input along with the most recent prompt. As the chat grows longer, the computational complexity of taking more context into account grows. So users are prompted to start a new chat when they want to discuss a different topic, and no context is preserved when a user closes the chat window and returns to use the chatbot at a later time. Even if the chatbot happens to perform better in future interactions after having apologized, that neither indicates a change of heart nor results from the earlier apologetic output.

Smith discusses apologies where one party to the apology lacks moral agency. For example, he imagines apologizing to his dog for neglecting them. Even though this lacks the dialectical nature of a categorical apology, he suggests, it “looks very similar to a categorical apology I might offer another human and it would have meaning *for me* in many of the usual respects” (2008, 126-7). Similarly, Smith suggests, there might be some value in apologizing to inanimate objects or to the dead. So it could, perhaps, be meaningful in some possible scenario for a user to apologize to a chatbot. Nevertheless, this line of thinking does not show that a chatbot can meaningfully apologize to a human— not any more than dogs, inanimate objects, or the dead can apologize.

## 6. Lessons and consequences

To summarize: Outputs from a chatbot look like apologies. And because its output is more variable than a single prerecorded message, a chatbot often seems to go beyond a general-purpose apology. The sentences can seem to be specifically about the current context and look more like a categorical apology. Nevertheless, we have argued, chatbots have neither the linguistic nor moral agency required for genuine apologies. Even sophisticated output is at most a rote apology.

We suggest two consequences of this for the practice and theory of AI.

First, this should serve as a cautionary note to designers. Given that it is impossible for a chatbot to authentically apologize, there is a certain danger in building chatbots that readily generate output that looks superficially like an apology. There is a risk that users will be misled. One might argue that chatbots should not use first-person pronouns at all, that this anthropomorphizes the system in a way that both deceives and alienates users.<sup>15</sup> If chatbots did

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<sup>15</sup> On the broader debate about anthropomorphism, see Schneiderman and Muller (2023) and Wakkary (2023).

not use first-person language, then they would not produce potentially misleading apology-like output.

For all we have said, however, there may be a usability reason for chatbots to produce outputs that look like apologies and, more generally, for them to use first-person language in their outputs. Even then, allowing the user to intelligently engage with such outputs requires making it clear that users are interacting with a chatbot rather than with a human. It is in the best interest of designers for users to be clear on who or what is responsible for failures and inaccuracies in chatbot behavior, both in order to comply with regulations and to foster user trust and reliance on these tools. Misleading users into thinking that these tools are in fact capable of performative speech acts like apologies is in explicit tension with those interests. Encouraging users to treat current chatbots as agents capable of apology is more ethically problematic than encouraging them to treat chatbots as capable of assertions, for several reasons: Unlike third-person assertion, the first-person nature of apologies involves a problematic anthropomorphism. Whereas it is arguably useful to pretend *as if* chatbots are capable of assertions, there is no world-oriented value to the pretense regarding apologies (as we argued in section 4). Although assertion involves an element of trust, apologies are more shot-through with moral significance (as we argued in section 5).

Second, as we noted at the outset, it is common to claim that chatbot output is *bullshit* in Harry Frankfurt's technical sense of the term. That is, chatbot output is produced with an indifference to truth or falsity. Even when the output is false, it is not an outright lie— because a lie is a falsehood told deliberately. Calling chatbot output bullshit dovetails with recognizing chatbots' inability to produce genuine assertions.

Importantly, apologies are not meant to track truth in the way that assertions do. So it makes no sense to condemn an apology for being indifferent to truth and falsity. The charge of *bullshit* in Frankfurt's sense doesn't stick.

Given chatbots' inability to offer a genuine apology, what should we say about outputs like the ones we surveyed in section 1? One option is to call these bullshit, too. This would require a broadening of Frankfurt's sense. The problem is not merely that the chatbot is indifferent to truth and falsity, but also that it is indifferent to whether it is successfully executing the performative elements of the speech acts which its outputs are easily misread as performing. Another option is to reserve the term *bullshit* for Frankfurt's sense— in which case we need a new disparaging term for this further shortcoming of chatbots.

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