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# What is a consumer product for? How teleology guides judgments of product liability

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#### Abstract

The law of product liability starts with the idea that a product should safely perform the function that it is for: a plaintiff can recover if she used the product for its intended purpose, but perhaps not if she misused the product. Previous work in psychology has suggested that people reason about artifacts in terms of their purpose. Yet, no work has tested the effect of misuse on judgment and decision-making, in particular in the context of product liability, or creator accountability. Two studies (N = 280, N = 282) show a robust effect of misuse on liability judgments, such that people are less likely to blame the creator in the case of misuse (vs. normal use). Additionally, both studies show a consistent pattern with regard to the role of individual differences in narrow teleology. When a product is misused, individual differences in teleology are strongly associated with liability judgments, but there is no such association when the product is used normally. This asymmetry suggests that judgments of misuse may be best explained in terms of what objects are for.

**Keywords:** artifact reasoning; teleology; legal reasoning; design stance

#### Introduction

A man may take a hammer to split nuts, an axe to cut a cake of pressed figs, a saw for sawing cheese, a rake to scoop up dried figs, a winnowing shovel and a pitchfork to place food upon it for a child, a reed or a shuttle to stick food, a small needle to remove a thorn, and a sack needle to open a door.

- Mishnah Shabbat 17:2

The manufacturer's liability should, of course, be defined in terms of the safety of the product in normal and proper use.

- Judge Traynor, Escola v. Coca-Cola

In 1987, a man decided to use the straps from a Volvo spare tire holder to transport metal rods. When the straps came loose and hit him in the eye, he sued Volvo. But the New Mexico Supreme Court dismissed the case, citing his misuse of the product that was meant for another purpose. *Van de Walde v. Volvo*, 744 P.2d 930 (N.M. Ct. App. 1987). This is just one of many product liability cases concerning a perplexing issue – which sorts of *uses* are acceptable?

The importance of use in products liability law begins with the premise that manufacturers make an implicit promise that the product safely performs the function that it is for. *Escola v. Coca Cola*, 150 P.2d 436 (Cal. 1944) (Traynor, J., concurring). Consequently, a product is considered defective when it does not safely perform its function. *Statler v. Ray*, 195 N.Y. 478 (1909). The law of torts therefore appears to

implicitly endorse the notion that products are for certain uses and not for others. But there does not appear to be an explicit guiding standard of what constitutes "misuse" and when and why it should matter (Calnan, 2002; Dale & Hilton, 1966). Courts are increasingly willing to accept uses that the manufacturer did not intend. Ellsworth v. Sherne Lingerie, 495 A.2d 348, 356 (Md. 1985). For example, a Michigan court once declined to rule that sniffing glue constitutes improper use. Crowther v. Ross Chem, 202 N.W.2d 577, 581 (Mich. Ct. App. 1972). Yet, courts also reject certain uses and cite discordant reasons why the plaintiff cannot recover (Calnan, 2002). Sometimes, misuse means that there was no defect. Venezia v. Miller Brewing, 626 F.2d 188, 192 (1st Cir. 1980). Other times, misuse is treated as an "intervening cause" which means the injury cannot be said to be caused by the product. Mazzi v. Greenlee Tool, 320 F.2d 821 (2d Cir. 1963). Or, misuse might be treated as an affirmative defense or as plaintiff misconduct that factors into some sort of comparative negligence consideration (Owen, 2000).

In any case, use matters, even if the law lacks a coherent picture as to why. One prediction is that, like courts, laypeople will be highly sensitive to misuse; but that, unlike courts, the reason why is simpler. In particular, lay judgments of liability should depend on whether the product was used for its purpose or not ("normal use" vs. "misuse".) Critically, this difference in liability judgments might be explained in terms of *teleology*.

People have a strong tendency to reason about artifacts in terms of their purpose (e.g., Bloom, 1996; Casler & Kelemen, 2005; German, Truxaw, & Deyfeter, 2007; Wohlgelernter, Diesendruck, & Markson, 2010). Even in Talamudic law, "teleology" is influential: prohibiting the use of culinary objects for their purpose on the Sabbath implies that such objects have a purpose (Neusner, 2006). Psychological work has found teleological thinking can be so rigid that it might be difficult to think of possible alternate uses of an object other than its primary function ("functional fixedness; German & Defeyter, 2000). Moreover, children as young as two and three years old have been shown to be sensitive to the misuse of artifacts: when presented with a puppet who uses a key to stir food, children protest the misuse and "tattle" to the experimenter (Casler, Terziyan, & Greene, 2009).

Yet, no work so far has tested the consequences of misuse on judgment and decision-making, in particular in the context of products liability, or more broadly creator accountability. Here, we investigated the effects of misuse in two experiments. Study 1 contrasted cases where the plaintiff uses an artifact for its intended function vs. an alternate function (e.g., sitting vs. standing on a chair). Study 2 tested cases

where function remained constant, but the target of the function was manipulated: e.g., using a coffee grinder to grind coffee vs. grind nuts. In both studies, we collected individual difference data on the extent to which participants endorsed narrow teleology for an artifact (e.g., that "A chair is for sitting" or that "A coffee grinder is for coffee.") People may be sensitive to cases of misuse precisely because misuse constitutes violations of teleology.

## **Study 1: Different Function**

In Study 1, we examined the effect of consumer use on lay judgments of products liability: specifically, what happens when a consumer uses a product for an *alternative function*? To do so, we presented participants with a story about a consumer plaintiff who uses a product and gets injured. Depending on the experimental condition (use condition: normal use vs. misuse), the plaintiff either used the product for its intended function (e.g., sitting on a chair) or for an alternative function (e.g., standing on a chair).

We predicted that a consumer plaintiff will be judged more favorably when using a product for its function (vs. an alternative function). All Methods and predictions were preregistered at: <a href="https://osf.io/jh6by/">https://osf.io/jh6by/</a>.

#### Method

**Participants**. Participants were 280 adults recruited from MTurk (119 male, 160 female, 1 unknown). Participation was restricted to MTurk workers in the United States who had completed at least 1000 past HITs with a minimum approval rating of 99%. An additional 20 participants were excluded from further analysis on the basis of pre-registered exclusion criteria: namely, failing any of three attention check questions.

**Materials & Procedure**. Participants were randomly assigned to read one of two versions of three possible vignettes about a plaintiff's use of a consumer product and subsequent injury. Depending on condition, the plaintiff had either used the product for its intended function or for an alternative function. The overall design was therefore a 2 (use condition: normal vs. misuse) x 3 (vignette) between-subjects design.

All vignettes portrayed a plaintiff experiencing an injury from resulting using a consumer product. The consumer product was either a chair, kitchen oven, or nutcracker – artifacts designed and made for one specific function and narrow purpose. Additionally, all artifacts were moderate in complexity in that: 1) each was composed of more than one part and 2) it would be difficult and/or implausible for a non-expert to craft one such artifact on his or her own by repurposing everyday materials. In all vignettes, the plaintiff's use of the product was intentional and deliberate. This use, whether misuse or normal use, preceded a subsequent legal injury, such as physical injury and damage to property. Between conditions, all vignettes were minimally contrasted such that the only difference between

the conditions concerned information about use. For example, the "chair" vignette is as follows:

Mary is a petite woman who recently purchased a chair from a company called ChairLy.

One night, [she sits down on the chair / stands up on the chair to reach a high-up book on her bookshelf]. The chair is unstable and collapses upon itself, also injuring Mary severely.

As illustrated above, the contrast between the two conditions is minimal in that the only difference is whether the plaintiff decided to use the chair for sitting vs. for standing (a different function). The other two vignettes have the same structure. In the "oven" vignette, a fire was caused either by the plaintiff's using it for baking or for heating the kitchen. In the "nutcracker" vignette, the plaintiff uses a nutcracker either for cracking nuts or hammering a nail in the wall and experiences a resultant injury when a part of the nutcracker breaks off.

After reading the vignette, participants were asked to make a series of six judgments designed to probe their inferences about liability: defectiveness, compensatory damages, punitive damages, defendant responsibility, plaintiff responsibility, and an exploratory question about comparative liability. Then, participants indicated their agreement with a manipulation check question on whether the plaintiff "used [the product] the wrong way." Participants then indicated their agreement with an exploratory question about but-for cause ("if only [the plaintiff] had [used the artifact for the other function], then the injury would not have occurred.") Participants then indicated the extent to which they endorsed a narrow teleology for the artifact in question (e.g., "a chair is only for sitting.") Finally, participants answered an open-ended question about the plaintiff's use ("What did you think of how Mary used the [product]?").

After completing the experiment, participants were prompted to respond to three attention check questions: one check question about reading ("please select 'somewhat agree'") and two multiple choice attention check questions about what the product was (with options for the product mentioned in the vignette and four irrelevant products) and how the plaintiff used it (e.g., "Mary tried to sit on the chair," "Mary tried to stand on the chair," and "don't know.") Then participants had the chance to answer demographic questions about their age, sex, previous involvement in class action lawsuits, and knowledge about the law.

#### Results

Before conducting the primary analysis, we looked at the manipulation check and confirmed that participants were more likely to agree that the plaintiff used the artifact wrong in the misuse (vs. normal use) condition, t(278) = 20.901, p < .001, d = 2.47, an effect that also held for each vignette at the p < .001 level.

We performed the primary pre-registered analysis by constructing a series of mixed effects models predicting participant judgments (defectiveness, compensatory damages, punitive damages, defendant responsibility, and plaintiff responsibility), treating condition (normal use vs. misuse) as a fixed factor and vignette as a random factor with respect to intercept. This approach revealed that participants in the misuse (vs. normal use) condition were less likely to judge the product as defective,  $\chi^{2}(1, 274) = 12.626, p < .001$ , d = 1.91. Additionally, they were less likely to endorse compensatory damages,  $\chi^2(1, 274) = 10.608$ , p < .001, d =1.18, and punitive damages,  $\chi^2(1, 274) = 10.009$ , p < .001., d = 1.15. Experimental condition also had an effect on judgments of defendant responsibility, such that the defendant was judged as less responsible,  $\chi^2(1, 274) = 11.954$ , p < .001, d = 1.34, and the plaintiff more responsible,  $\chi^2(1,$ (274) = 13.18, p < .001, d = 1.48, when the product was used for an alternative function.

We then conducted an exploratory analysis using the same mixed effects approach to analyze judgments of two more variables: but-for cause and comparative liability. This analysis revealed that participants in the misuse (vs. normal use) condition were more likely to agree that the injury would not have occurred if the use was different,  $\chi^2(1, 274) = 13.980$ , p < .001, d = 1.54. Also, when faced with a question of comparative liability, or apportioning liability between the defendant and plaintiff, participants were more favorable to the plaintiff when the product was used for its intended function (vs. an alternative function),  $\chi^2(1, 274) = 13.653$ , p < .001, d = 1.51.

We then calculated a composite liability judgment score by averaging judgments of defectiveness, compensatory damages, punitive damages, plaintiff responsibility (reverse-coded), and defendant responsibility (cronbach  $\alpha$  = .96). With this composite liability score, we first checked that each individual vignette exhibited an effect of use condition on liability judgments (See Figure 1). Indeed, the effect of use condition was significant in each of the three vignettes: chair, t(278) = 7.322, p < .001, d = 1.5; nutcracker, t(278) = 11.193, p < .001, d = 2.33, and oven, t(278) = 5.315, p < .001, d = 1.11.

Finally, we used the composite liability score to conduct an exploratory analysis on individual differences in endorsement of narrow teleology (e.g., "a chair is only for sitting"). In the misuse condition, individual differences in narrow teleology were significantly associated with composite liability, pearson r = -.55, p < .001, such that participants endorsing narrow teleology were more likely to make unfavorable judgments to a plaintiff using a product for an alternative function (see Figure 2). This correlation between liability judgments and individual differences in teleology only applied to cases of product misuse. When a plaintiff used the product normally, participant teleology had no association with liability judgments, r = 0.068, p = .42.

If teleology indeed matters for misuse more than for normal use, we should additionally expect a significant interaction effect. To test for this effect, we created two mixed effects models: one "full" mixed effects model predicting composite liability with condition, participant teleology, and their interaction as fixed effects and scenario as random effect, versus that same model without the interaction between condition and participant teleology. This analysis revealed a significant interaction,  $\chi 2(1, 279) = 36.649$ , p < .001, such that misuse was more sensitive to teleology compared to normal use.

#### **Study 1 Discussion**

Study 1 found a robust effect of misuse on liability judgments. A plaintiff is judged more harshly when she uses a product for an alternative function rather than the intended function. In the case of misuse, people judge the product as less defective, the plaintiff as less deserving of damage awards, and attribute liability toward the plaintiff and away from the defendant, compared to normal use. Additionally, plaintiff misuse is more likely than normal use to be rated as a but-for cause of the injury.

Intriguingly, liability judgments for misuse cases were highly associated with individual differences in teleology, but participant teleology made no difference in the case of normal use. Thus, liability judgments of misuse may be guided by notions of what objects are for.

## **Study 2: Same Function, Different Target**

Study 1 found that people judge a plaintiff more harshly when she uses a consumer product for an alternative function, for example, using an oven to heat the kitchen rather than to bake. In Study 2, we examined whether sensitivity to information about use would generalize and extend to cases where an artifact is used for the correct function, but incorrect target: for example, using a coffee grinder to *grind coffee* vs. *grind nuts*. To examine cases of misuse with regard to "alternative target," we again used a 2 (use condition: normal vs. misuse) x 3 (vignette) between-subjects design.

We again predicted that a consumer plaintiff will be judged more favorably when using a product for its function (vs. an alternative function). We additionally predicted to replicate the Study 1 result that liability judgments of misuse should be especially sensitive to individual differences in narrow teleology. As with Study 1, Methods and predictions for Study 2 were pre-registered at: https://osf.io/jh6by/.

#### Method

**Participants.** Participants were 282 adults recruited from MTurk (127 male, 54 female, 1 other). Participation was restricted to MTurk workers in the United States who had completed at least 1000 past HITs with a minimum approval rating of 99%. An additional 18 participants were excluded from further analysis on the basis of pre-registered exclusion criteria: failing any of three attention check questions.

Materials & Procedure. Participants were randomly assigned to read one of two versions of three possible vignettes about a plaintiff's use of a consumer product and

subsequent injury. Depending on condition, the plaintiff had either used the product for its intended target or for an alternative target. The overall design was therefore a 2 (use condition: normal vs. misuse) x 3 (vignette) between-subjects design.

As with Study 1, vignettes portrayed a plaintiff experiencing an injury resulting from use of a consumer product. The product in question was either a coffee grinder, wood lathe, or tire holder. All products met the criteria specified in Study 1, for example, all products were artifacts narrow in function scope. Additionally in Study 2, all artifacts had a specific target: for example, as seen in the "coffee" vignette, a coffee grinder is not just for grinding writ large, but for grinding coffee in particular:

Mary recently purchased a coffee grinder from a company called XPresso. [However,] [s]he likes to use it to grind [nuts/coffee].

One day, she uses it to grind [nuts/coffee]. But when it starts, the metal part of the coffee grinder detaches from its holder and breaks through the plastic, cutting Mary's hand. She will be unable to use the full range of motion of her hand again.

Here, the contrast between the two conditions is even more minimal than Study 1. In Study 1, the "misuse" condition featured using an artifact for a different function. But in Study 2, the "misuse" condition involves using the artifact for the same function, but simply applying that matched function toward a different target. The other two vignettes also follow this approach: using a wood lathe to cut wood vs. cut metal ("lathe" vignette) and using a spare tire holder for holding a spare tire vs. holding metal rods ("tire" vignette, inspired by Van de Walde v. Volvo).

The rest of the procedure followed exactly as in Study 1. After reading the vignette, participants made six judgments about liability: defectiveness, compensatory damages, punitive damages, defendant responsibility, plaintiff responsibility, and an exploratory question about comparative liability. Then, participants indicated agreement with the manipulation check (whether the plaintiff "used [the product] the wrong way.") Participants then indicated their agreement with the exploratory but-for cause question ("if only [the plaintiff] had [used the artifact for the other function], then the injury would not have occurred.") Participants then indicated the extent to which they endorsed a narrow teleology for the artifact in question (e.g., "A coffee grinder is only for coffee.") Participants also answered an open-ended question about the plaintiff's use ("What did you think of how Mary used the [product]?").

After completing the experiment, participants completed the same three attention check questions as in Study 1. Then participants could answer demographic questions about their age, sex, previous involvement in class action lawsuits, and knowledge about the law.

#### Results

Before proceeding with the primary analysis, we first looked at the manipulation check question and confirmed that participants were more likely to agree that the plaintiff used the artifact wrong in the misuse (vs. normal use) condition, t(278) = 20.901, p < .001, d = 2.47, an effect that was also significant for each vignette at the p < .001 level.

We first looked at the manipulation check question and confirmed that participants were more likely to agree that the plaintiff used the artifact wrong in the misuse (vs. normal use) condition, t(280)=16.19, p<.001, d=1.91, an effect that was also significant for each vignette at the p<.001 level.

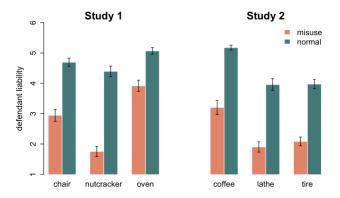


Figure 1: Study 1 & 2 composite liability judgments by vignette. In both studies and for each vignette, the defendant is more liable in the "normal" condition (vs. the "misuse" condition). Error bars represent SEM.

As indicated in the pre-registration, and as in Study 1, we performed the primary analysis by constructing a series of mixed effects models predicting participant judgments (defectiveness, compensatory damages, punitive damages, defendant responsibility, and plaintiff responsibility), treating condition (normal use vs. misuse) as a fixed factor and vignette as a random factor with respect to intercept. This approach revealed that, as predicted, the effects found in Study 1 (different function) also replicate to Study 2 (same function, different target). More specifically, information about consumer use indeed influenced judgments of product defectiveness, such that participants were less likely to see the product as defective when its function was misused, or, in other words, directed toward an alternative (vs. intended) target,  $\chi^2(1, 276) = 16.311$ , p < .001, d = 1.84. Also, participants in the misuse condition were also less likely to endorse awarding compensatory damages,  $\chi^2(1, 276) =$ 13.39, p < .001, d = 1.59, and punitive damages,  $\chi^2(1, 276)$ = 10.833, p < .001, d = 1.31. Additionally, the plaintiff was seen as more responsible,  $\chi^2(1, 276) = 13.89$ , p < .001, d =1.31, and the defendant less responsible,  $\chi^2(1, 276) = 13.22$ , p < .001, d = 1.55, in the case of misuse (vs. normal use).

We also conducted a pre-registered exploratory analysis, using the same mixed effects approach to analyze judgments of but-for cause and comparative liability. This analysis revealed an effect of condition on but-for judgments: participants in the misuse (vs. normal use) condition were more likely to think the injury would not have occurred if the target was different,  $\chi^2(1, 276) = 18.05$ , p < .001, d = 2.17. Also, misuse influenced judgments of comparative liability, such that participants were more favorable to the plaintiff when the product was used for its target (vs. an alternative target),  $\chi^2(1, 276) = 15.703$ , p < .001, d = 1.81.

We then conducted a composite liability judgment score by averaging judgments of defectiveness, compensatory damages, punitive damages, plaintiff responsibility (reverse-coded), and defendant responsibility (cronbach  $\alpha$  = .97). With this composite liability score, we could conduct an exploratory analysis to quickly check that each individual vignette exhibited an effect of use condition on liability judgments (see Figure 1). Indeed, the effect of use condition was significant in each of the three vignettes: coffee grinder, t(280) = 8.122, p < .001, d = 1.9, wood lathe, t(280) = 7.969, p < .001, d = 1.68, and tire holder, t(280) = 9.033, p < .001, d = 1.84.

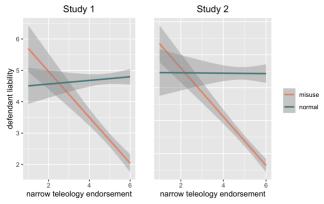


Figure 2: Study 1 & 2 regression lines of composite liability judgment, split by condition (misuse vs. normal).

Shading represents 95% CI.

As in Study 1, we explored the role of individual differences in endorsement of narrow teleology for an artifact (e.g., "A coffee grinder is only for coffee") in the misuse and normal use cases (see Figure 2). Splitting the data by condition, we again found a correlation between participant teleology and composite liability judgments in the case of misuse, r = -.67, t(280) = 11.14, p < .001, but again not for normal use, r = -0.0006, t(280) = 0.07. In other words, when the artifact is misused, liability judgments are highly associated with teleology, or notions of what that artifact is for. But when the artifact is used normally, liability judgments are independent of teleology. Moreover, we statistically tested this asymmetry in a pre-registered exploratory analysis comparing two mixed effects models: a "full" mixed effects model predicting composite liability with condition, participant teleology, and their interaction as fixed effects and scenario as random effect, versus that same model without the interaction between condition and participant teleology. This analysis revealed a significant interaction,  $\chi^2(1, 281) = 42.28$ , p < .001, such that misuse was more sensitive to teleology compared to normal use.

#### **Study 2 Discussion**

The effect of misuse on liability judgments identified in Study 1 also extends to cases when the artifact function is fixed but the target is varied – for example, using a coffee grinder to grind nuts instead of grind coffee. As with Study 1, the effect of misuse was robust, revealing a large influence for each dependent variable and within each vignette. Also, liability judgments for misuse cases were highly associated with individual differences in teleology, but participant teleology made no difference in the case of normal use, replicating our Study 1 finding.

#### **General Discussion**

Two studies (N = 280, N = 282) revealed a novel effect of misuse on judgments of product liability. Study 1 presented participants with scenarios about artifacts that were used either for a primary or alternative *function*: for example, using an oven *to bake* versus *to heat* the kitchen. Participants were highly sensitive to misuse, attributing less liability to the manufacturer when the consumer had used the product for an alternative function. Study 2 tested an extension of the effect of misuse in the case of "same function, different target" scenarios: for example, a coffee grinder used for *grinding nuts* versus grinding coffee beans. Study 2 replicated and extended the results of Study 1, finding that even when the function was matched, information about misuse in the form of "alternate target" also influenced liability judgments.

Further, both studies show a consistent pattern with regard to the role of individual differences in narrow teleology – for instance, that "A chair is only for sitting," or that "A coffee grinder is only for coffee." Both studies show that when a product is misused, individual differences in teleology are a powerful determinant of liability judgments. But when a product is used normally, i.e., toward its intended function or target, individual differences in teleology bear no relation to such judgments. This asymmetry suggests that intuitions about products liability cases of misuse may be guided by a deep notion of what objects are for.

Taken together, these studies suggest that people are sensitive to misuse of artifacts, with downstream consequences for judgment and decision-making. Participants in our studies used information about what artifacts are for – both in function and target – in deciding who should be responsible in a products liability scenario. Further, the extent to which participants incorporated information about misuse appeared to be associated with the extent to which they saw the artifact as having a narrow function.

Previous work has shown that children as young as three are sensitive to hierarchies within misuse – the difference between "express violations" such as using a key to stir food versus mere alternate uses such as tracing around a key (Casler et al., 2009). This raises a theoretical question about the present work and how exactly misuse is conceptualized: for instance, does an artifact simply possess a primary target and function, or does it also possess certain targets and functions to avoid? It could be that people dislike misuse of consumer products because the plaintiff failed to meet the intended function and/or target. Alternatively, perhaps it is because the plaintiff used the product for prohibited functions or prohibited targets. It may be that people distinguish between different magnitudes of misuse. If the effect of misuse on liability judgments is indeed about teleology, then functional similarity of alternate uses should matter: people should be more receptive to alternate uses that are similar to the primary use. The present studies lay the groundwork to investigate these questions: by first demonstrating that misuse matters, we can now ask why.

Though most research on artifact reasoning has collapsed the distinction between function and target, the sensitivity of liability judgments to both raises new psychological questions about artifact reasoning writ large – for instance, is the sense that objects are for a specific function stronger than the sense that they are for a specific target? Are function and target both equally determinative of category membership? But even in the domain of law, the concepts of "function" and "target" warrant more research in the domain of product liability judgments. By examining both forms of misuse, alternate function and alternate target respectively, Studies 1 and 2 showed how both exerted an effect on liability judgments; further, both were moderated by the same particular pattern with regard to individual differences in teleology. Yet with this information alone, it cannot be inferred that manipulation of function and target are psychologically identical. There may be instances where one is privileged above the other, or there may be artifacts that are more closely tied to a function than a target or vice versa. Future research can examine the effects on liability judgments when the two are pitted against each other: for example, imagine using a wood lathe (meant for cutting) to cut wood, cut metal, drill wood, or drill metal.

Whether in the form of alternate function or alternate target, use matters. It remains to be shown: in the context of products liability scenarios, what is proper use? In the law, a debate concerns whether the guiding standard should be "manufacturer intent" or "reasonable foreseeability," with a trend toward the latter. For example, in *Ellsworth v. Sherne*, when faced with a plaintiff who suffered an injury from wearing her nightgown inside out, the Maryland Court of Appeals found that although the manufacturer intended for the nightgown to be worn the right way, the manufacturer could have reasonably anticipated that consumers would wear the nightgown inside out. This legal distinction foreshadows two of possibly many theories that might describe lay intuitions for such cases: for instance, people

might privilege manufacturer intent over reasonable foreseeability.

How people might integrate other cues to function, such as labels, convention, and outward features, when reasoning about the purpose of consumer products? People might look to manufacturer or FDA labels when reasoning about what a product is for. But off-label use of drugs is commonplace and sometimes manufacturer labels are disingenuous. For instance, the warning label on a Q-Tip box reads "Do not insert swab into ear canal" — do people really agree that Q-Tips are not for ears? Additionally, it is unknown how people might reason about cases where a product is designed for a specific purpose but is then popularly used for a different purpose. If indeed these robust effects of misuse on liability judgments are driven by notions of what products are for, the next step in this line of research is to uncover what exactly that means, both in function and in target.

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