

Anthony Parkhill  
Barnow and Associates, P.C.  
1 North Lasalle Street  
Chicago, IL 60602

October 4, 2017

Dear Mr. Parkhill,

We are pleased to submit the following report, which you requested.

### **Introduction**

1. We have been asked to report on advertising language for various grated cheese products. Specifically, we will address the question of what constitute reasonable readings of the phrases "100% Grated Parmesan Cheese," "100% Grated Parmesan and Romano Cheese," and "100% Grated Three Cheese Blend." In the analysis below, we focus on the phrase "100% Grated Parmesan Cheese" as representative of all three phrases.
2. The noun phrase "100% grated Parmesan cheese" consists of a head noun ("cheese") and three attributive modifiers ("100%," "grated," and "Parmesan"). Although phrases with three modifiers have the potential for multiple interpretations in terms of how the modifiers stack (in other words the scope of what an initial modifier modifies), it is our opinion that only one interpretation of this phrase is plausible in context.

### **Readings**

3. Judge Gary Feinerman has supplied three possible interpretations of the phrase, and we address the plausibility of each reading below.

#### **Reading 1: [100% grated] [Parmesan cheese]**

- a. Reading 1 can be paraphrased as "Parmesan cheese that is 100% grated."
- b. A modifier like "100%" may only apply to a word that is *gradable* (one that has various levels). For instance, a person can be 100% satisfied, since there are various levels of satisfaction, but it's odd to call someone "100% pregnant," since in common speech there aren't different levels of being pregnant.
- c. When you grate a hunk of cheese at home, it does progress through levels of being 50%, 75%, and finally 100% grated. However, in the context of packaged cheese, such levels do not obtain: no cheese is sold in packages with, for instance, 50% grated, 25% sliced, and 25% whole cheese. Therefore it's odd to call any packaged cheese "100% grated" in the same way it's odd to call someone "100% pregnant."
- d. Thus, no reasonable shopper would conclude that Reading 1 is the meaning of the phrase "100% grated Parmesan cheese."

#### **Reading 2: [100% [grated Parmesan]] cheese**

- a. Reading 2 can be paraphrased as "cheese that is 100% grated Parmesan"

- b. Something that is merely called "grated Parmesan" could potentially contain minor additives, preservatives, etc. The linguistic imprecision that allows such extra ingredients is the same kind of imprecision that allows "lean beef" to contain some fat and allows a "3pm meeting" to start at 3:05. Linguists call such imprecision "pragmatic slack."<sup>1</sup>
- c. Speakers vary the level of slack they intend for phrases such as "3pm meeting" and "lean beef." This effectively make such terms gradable and suitable for modification by terms like "90%," "100%," and "precisely." For instance, a meeting at "precisely 3pm" has very little slack, i.e., it cannot start at 3:05; and "90% lean beef" cannot contain any more than 10% fat. In the same way, something that is "100% grated Parmesan" has no slack: it cannot contain anything that is not grated Parmesan.
- d. Thus, "cheese that is 100% grated Parmesan" contains nothing that is not grated Parmesan, and therefore nothing that is not cheese (since Parmesan is cheese). This makes Reading 2 identical in meaning to Reading 3 below.

**Reading 3: 100% [grated Parmesan cheese]**

- a. Reading 3 can be paraphrased as "(food that is) 100% cheese that is grated Parmesan." Again, the 100% modifier removes slack from the meaning, disallowing additives or other ingredients.

**Implicature**

- 4. If there is only one phrase on the front of a container's label, it can be understood to represent everything that is in the container. Here we rely on philosopher H. P. Grice's theory of conversational implicature, which distinguishes between what is literally entailed by an utterance and what is conventionally implicated by an utterance (or in this case a phrase on a label).
- 5. Conversational implicature is governed by convention. Two key general principles are that the information will be relevant and adequately informative within the context.
- 6. If a label reads "cheese and crackers," it is conventionally implied that the container contains both cheese and crackers. It does not contain only olives (without cheese and crackers) because this would make the label "cheese and crackers" irrelevant. It also does not contain cheese, crackers, and olives because this would make the label inadequately informative, as it does not include one of the three main items in the container.
- 7. In the context of labels, it would be odd to see something labeled only "cheese" or "grated Parmesan cheese" that also contained something clearly not cheese-like, such as crackers or wine or pickles, etc.
- 8. And, as described in paragraph 3 above, the addition of "100%" in Readings 2 and 3 of the phrase "100% grated Parmesan cheese" removes imprecision or slack from the meaning of "grated Parmesan cheese," disallowing additive ingredients. Finally, Reading 1 (where "100%" only modifies "grated") is pragmatically ruled out in this context.
- 9. Therefore, it is our expert opinion that no reasonable shopper would expect that a container labeled "100% grated Parmesan cheese" would contain significant amounts of non-cheese-like substances.

---

<sup>1</sup> Lasersohn, P. (1999). Pragmatic Halos. *Language*, 75(3), 522-551. doi:10.2307/417059

Sincerely,

Anne Curzan, Ph.D.  
Professor of English, Linguistics, & Education, University of Michigan

Ezra Keshet, Ph.D.  
Professor of Linguistics, University of Michigan

