Conceptual and grammatical distinctions between count and non-count nouns

Leslie Davis, Kathleen Hamel and Anne Sheriff

Colorado State University
The acquisition of count and mass noun distinction by English language learners (ELLs) proves difficult for reasons such as the presence or lack thereof of these distinctions in the L1, the possibility of individuation, and the possibility for abstract nouns to be counted. As seen in our experience with English language learners’ speaking and writing at INTO-CSU and at The Writing Center, failure to properly attribute mass or count status to a noun can affect plural markers, contribute to improper use of modifiers and quantifiers, and lead to improper use of articles. Because of the wide range of issues that can stem from this classification, we chose to explore why learners might be unable to properly determine count or mass status.

Fieder, Nickels, and Biederman (2014) take a cognitive linguistic approach in determining whether or not it is the grammatical features or the semantic features of these nouns which contribute to their countability. Instead of conducting a study of their own, they look at claims that mass nouns are either marked or unmarked. The possibility for addition, indivisibility, boundaries, and the cognitive individuation hypothesis are all used to give the reader some context for their argument. In particular, the cognitive individuation hypothesis states that people classify nouns based on how they interact with and perceive these nouns, meaning that how easily distinguishable these nouns are will have an effect on their perception of countability. Different languages may classify the same noun in different ways (e.g. French *meuble* is count, English *furniture* is mass, and Japanese does not make a distinction), meaning that their perception of and interaction with this noun is conceptually different. However, as the research has shown, there is a conceptual connection across languages that contradicts ideas of linguistic relativity (Iwasaki, Vinson, & Vigliocco, 2010).

Beginning with English and Japanese, Fieder, Nickels and Biedermann (2014) discuss the different ways of differentiating between count and mass. Japanese does not distinguish nouns by
whether or not they are countable, but rather by how they can be counted. For example, Japanese uses classifiers to demonstrate the shape of an object, its function (e.g. building), or its portion (e.g. a slice of something), and countability is never specified unless the speaker wants to count the noun, and any noun has that possibility of being counted by a classifier (Inagaki, 2014; Iwasaki, Vinson & Vigliocco, 2010). Shirahata found that the indefinite article a was among the last forms to be acquired by Japanese learners of English (Inagaki, 2014), and its characteristic as a denumerator (Fieder, Nickels, & Biedermann, 2014) may contribute to this difficulty.

Iwasaki, Vinson, and Vigliocco (2010) conducted a study to determine whether native English speakers and native Japanese speakers would make similar errors which would reveal a conceptual link to countability, rather than a grammatical link. According to Iwasaki et al. (2010), linguistic relativity should implicate that English speakers are more sensitive to differences between count and mass than their Japanese-speaking counterparts. However, if linguistic relativity proved incorrect that sensitivity should be shared, and the errors that the participants in both English and Japanese make would show a mass/count connection between the correct and incorrect response. For example, if a speaker says “broccoli” when the correct answer was “cauliflower”, a conceptual connection is revealed because both the correct and incorrect answer share the same characteristic of non-count. Again, linguistic relativity would assume that the mistakes made by learners in each language would reveal conceptual differences rather than similarities, because each language has its own conception of count and mass nouns. However, at the end of their study, Iwasaki, Vinson and Vigliocco (2010) found evidence against linguistic relativity, because the errors made by both speakers were consistent in their conceptual similarities. The implications of this for ELLs seem to be positive, because if there is some
conceptual similarity regardless of language or L1, we should be able to help students find those connections as well.

While Fieder, Nickels and Biedermann (2014) found that both mass and count nouns are marked semantically for $\{\pm \text{INDIVIDUATED}\}$, and that both semantics and grammar play a role in determining countability, Iwasaki, Vinson, and Vigliocco (2010) found that the distinction comes conceptually (aka semantically), even for speakers whose native language does not require them to consider countability. Both studies attempt to understand whether countability is semantically or grammatically determined.

To continue examining these levels of distinction between count and non-count nouns, the researchers determined there were four categories of nouns: concrete count (CC) nouns (for example: cup), abstract count (AC) nouns (for example: idea), concrete non-count (CN) nouns (for example: furniture) and abstract non-count (AN) nouns (for example: information). Based on these distinctions, we hypothesize that it will be easier for ELLs to correctly identify CC and AN nouns than AC and CN.

**Participants**

Participants in this study included fourteen INTO CSU students in an intermediate-low grammar class. All were in their first term at INTO CSU and took a placement test which placed them at this level for grammar. However, they had differing amounts of English education in their home countries and were in varying levels in the other skill areas. They also spoke a variety of L1. The participants were seven Portuguese speakers, four Chinese speakers, two Arabic speakers and one Japanese speaker. Twelve students took the gap-fill probe written by the researchers (one Portuguese and one Arabic speaker were present the day it was
administered) and all fourteen participants took the count/non-count noun test required for the class that included the count/non-count noun identification.

**Measurement and Procedure**

In this study, the researchers were testing students’ conceptualization of abstract versus concrete and count versus non-count and their subsequent combinations. To test the hypothesis, the researchers developed a gap-fill probe with three parts (Appendix A). All three parts included unconnected, unrelated sentences. In the first part, students needed to choose between *many* and *much*, in the second part, they needed to choose between *a little* and *a few*, and in the last part, students choose between *a*, *an* and *some*. One aspect of this probe that should be considered is the use of *many*, *much*, *a few* and *a little*. *Many* and *a few* collocate with plural count nouns while *much* and *a little* collocate with singular non-count nouns. Students who were aware of this pattern did not need to know if a given noun was count or non-count, because they could decide based on the presence or absence of the plural marker. For this reason, the percentage correct on these two sections, 96% and 93% respectively, was much higher than on the *a*, *an*, *some* section, 78%. The probe was administered as part of a review day before the students took their count/non-count noun test.

Students also took a test that was required as part of the grammar class. Data from one section of this test was used in this study. On this section of the test, students were asked to identify given nouns as count or non-count. Like the *a*, *an*, *some* section of the researchers’ test, this section provided no contextual clues about count/non-count distinction (Appendix B). It also did not provide any contextual clues about the meaning of the words. The percentage correct on this section was 92%. This test was given two days after the review day where the first probe was administered.
Discussion

Upon creation of our tests, we categorized our answers into four different categories: abstract/count nouns (AC), concrete/count nouns (CC), abstract/non-count nouns (AN) and concrete/non-count nouns (CN). We determined a noun labeled concrete is one that has physical measurability in the context in which it was used, as opposed to an abstract noun of which is more of a concept or idea. For example, there can be the idea of money, abstract, or money can also be physical coins and bills, concrete.

The percentage of correct responses for each of these distinctions amongst the subjects is displayed in Table 1. A fifth category was distinguished after the probe was administered. We designated this category as Idiomatic because it did not qualify under the other categories since, “to go on a run,” is an idiomatic expression.

<table>
<thead>
<tr>
<th>Noun Distinction</th>
<th>Percent Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete-Count</td>
<td>93</td>
</tr>
<tr>
<td>Concrete-Noncount</td>
<td>80.2</td>
</tr>
<tr>
<td>Abstract-Noncount</td>
<td>89.8</td>
</tr>
<tr>
<td>Abstract-Count</td>
<td>71.4</td>
</tr>
<tr>
<td>Idiomatic</td>
<td>66.7</td>
</tr>
</tbody>
</table>

Table 1

Concrete-Count nouns are the most easily to be able to conceptualize for students (in terms of being able to visualize the individual parts to be counted) as is reflected in our results as such since it had the highest percentage correct. From our results from the other categories, one can see that abstract nouns were more difficult to determine, with AC being the hardest to identify. This aligns with our hypothesis since abstract, countable nouns are not as common in the English language as the other types of nouns in this study. The idiomatic category was the hardest for our subjects to identify, as seen in our results with only 66.67% of students getting
this answer correct. This is to be expected, because ELLs usually think of run as a verb and therefore not something that would ever function as a noun.

**Conclusion**

Based on the results of the study, it is clear that the count/non-count noun distinction remains one that causes problems for ELLs. This difficulty is due not only to the other grammatical rules governed by this difference, but lack of consistent rules governing which nouns can be count and non-count. ELLs cannot rely on the difference between abstract and concrete nouns as the only way to determine if a noun is count or non-count and consequently which article or quantifier to use. One way to help students overcome this difficulty could be for them to learn the count/non-count status of new nouns as they study and learn new words.

Upon review of the study, we determined that one of the factors that could be modified would be the distribution of the different categories amongst the test questions. Although the first test we administered was close to 1:1 non-count:count, it was not exact and ended up being 14:11; with the addition to the second test is that data, it skews the proportionality even more with 3:2. If our probe was balanced, it would’ve given a more clear view if non-countable nouns were accurately represented by percent correct. In addition to the noncount:count ratio being skewed, the proportion of concrete to abstract nouns was 37:13 between the two tests. Combining these two qualifiers gives us disproportional ratios between the four categories, especially for AC where there was only one example given, ‘idea’. Since our hypothesis claims that AC nouns are the most difficult for ELL to learn, it would have been more beneficial for this study if more examples were included. With the lowest score out of the four noun groups, with only 71% correct in the AC group, this percentage made us question another aspect of our study.
References


Appendix A

Test 1 (Researcher-developed quiz)

Chapter 7 Check-In: Count & Noncount Nouns

Name __________________________

A. Complete the sentences with either many or much.
1. Fort Collins doesn’t have _____________________ traffic.
2. We don’t have _____________________ time to get this done.
4. Diego doesn’t have that _____________________ hair.
5. Do you know how _____________________ beer Sue bought for the party?
6. How _____________________ tea does Jason drink?
7. Teachers don’t have _____________________ patience for people who are always late.
8. I think my neighbor has too _____________________ cats.
9. Ali didn’t drink _____________________ water after he exercised, so he’s really thirsty.
10. Are there _____________________ clouds in the sky?

A. Complete the sentences with either a few or a little.
1. Matheus has _____________________ questions before the test.
2. I found _____________________ vegetables in my refrigerator.
3. Yesterday, Thais received _____________________ mail.
4. Ema went to the zoo and saw _____________________ lions.
5. Fang is hungry. She needs to eat _____________________ food.
6. There are _____________________ bananas in the basket.
8. I need _____________________ advice.
9. French people often eat _____________________ cheese after each meal.
10. I eat _____________________ pieces of chocolate every week.

A. Complete the sentences with a, an or some.
1. Jose didn’t want to buy ________ apple at the supermarket.
2. I bought ________ fruit from the farmer’s market.
3. Jianing likes to go for ________ run every morning.
4. They have ________ furniture in our apartment.
5. Bob brought me ________ avocado from the garden.
6. There is ________ university in Fort Collins.
7. You need to have ________ information to write ________ paper.
8. Anne sliced ________ pepper for her salad.
9. The students had to do ________ research for their project.
Appendix B

Test 2 (Test required for class)

**Part 2: COUNT OR NONCOUNT?** Write whether the nouns are count (C) or noncount (N).

1. sand ________ 4. idea ________

2. money ________ 5. air ________

3. person ________ 6. luck ________