A Singular View of Mass in Marsican

Chierchia (1996, 1998) proposed that the extension of mass nouns is essentially the same as that of plurals, which is taken to denote a class of sets of individual. His model—a lattice of individuals adopted from Link (1983)—assumes a domain of entities constituting a complete free atomic join semi-lattice containing both singular entities (atoms) and their sums (pluralities); see (1). Under this model, a singular count noun is taken to denote a class of objects or individuals. They constitute the reference of singular definite nouns like ‘John’, ‘that table’. The individuals in bracket are the plural ones and constitute the reference of plural definite nouns like ‘those tables’. A mass noun like ‘furniture’ simply denotes a set of ordinary individuals plus all the pluralities of such individuals. Dubbed ‘The Inherent Plural Hypothesis’, Chierchia takes this plurality view as the null hypothesis of mass nouns.

Marsican, an Italo-Romance language of the Abruzzo region in Italy, however, would pose a serious challenge to this prediction. Marsican has a clear distinction between count and mass nouns, though it has no plural marking; see (2). As first noted in Saltarelli (2000), its nouns realize both singular/plural and mass/count contrasts uniquely on the determiner. In languages like Marsican, then, where mass IS encoded as singular, a theory such as the Inherent Plural Hypothesis would actually prove to be counterintuitive. As the Marsican system has evidently shown the inexistence of mass plural DPs, it makes no sense to say that mass nouns in Marsican are inherently plural.

An alternative proposal is to treat mass terms as singular-denoting. That is, mass nouns denote a singleton-whole rather than a plurality of individual. Moreover, this ontological distinction is reflected in the syntax if mass nouns are analyzed as an NP and count nouns as DPs.

Specifically, in DPs, the determiner, a kind of quantifier specifying a unique entity, will select an NP. For a cane ‘the dog’, it will has referential function by the fact that it is a count noun <+CT> (Saltarelli, p.c.); see (3). Each projection will have a function and noun will move to check the function. In the case of count nouns, it projects a determiner and as consequence, moves to D then to Num to satisfy number, as Num selects DP. On the other hand, mass nouns are NPs and do not project a determiner; see (4). The implication here is that because they don’t have determiner, mass nouns don’t have plural. Thus, pane ‘bread’ cannot move (i.e. non-CT function) to D because it’s not plural; it’s not referential.

This singular view of mass terms is not only empirically and logically appealing, but also avoids the problem of acquisition faced by Chierchia’s hypothesis. Indeed, Chierchia’s hypothesis that mass nouns are lexically plural requires an explanation on grounds of learnability. Yet, from what input or other evidence does a speaker learn that lexical items in the Marsican data are lexically plural? Recognizing a mass/count distinction, the proposed view of mass terms faces no such problem.

In summary, the counterintuitive nature of the Inherent Plurality Hypothesis in light of Marsican data forces us to rethink the ontological status of mass nouns. Towards a solution, an alternative view—a singular view of mass terms—is proposed.
Data

(1) A Lattice of Individuals
“Students” = \[
\{ f, b, s \}
\] 
\[
\{ f, b \} \quad \{ b, s \} \quad \{ f, s \}
\]
“Student” = \[ f, b, s \] = At

(2)

<table>
<thead>
<tr>
<th>1. DETERMINERS (DEF.)</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Masculine (i) Count</td>
<td>[s(\omega)]</td>
<td>[(\lambda\omega)]</td>
</tr>
<tr>
<td>(ii) Mass</td>
<td>[l(\omega)]</td>
<td>---</td>
</tr>
<tr>
<td>b. Feminine (i) Count</td>
<td>[l(\omega)]</td>
<td>[l(\omega)]</td>
</tr>
<tr>
<td>(ii) Mass</td>
<td>[l(\omega)]</td>
<td>---</td>
</tr>
</tbody>
</table>

2. a. i. \([a\ \kappa\omega]/[\lambda\varepsilon\ \kappa\omega]\) ‘the dog/dogs’

ii. \([l\omega\ \varepsilon\nu]/^{*}\text{plur.} \) ‘wine/*plur.’

(3) cane ‘dog’

(4) pane ‘bread’

Reference
Saltarelli, M: 2000, Gender Identity and Linguistic Constraints the Selection of the Determiner, AAIS.