



cheese) in (3) (a true partitive) denotes precisely such an object. Pseudopartitives are not about parts of a larger whole (like true partitives), but about partitions of an underlying domain of individuals: *liters of water* partitions water into liters, *boxes of books* partitions books into boxes etc.

Romanian overtly encodes the difference between these two kinds of constructions: the preposition *de* appears only with pseudopartitives, while the preposition *din / dintre* appears only with true partitives (see also Tănase-Dogaru 2007). The independent semantic criterion used in (2) and (3) above to distinguish between these two constructions is due to Ladusaw (1982): partitives allow only referential, definite DPs as their second DP, while pseudopartitives disallow such DPs.

The proposal that measure nouns are polysemous integrates Schwarzschild (2006), which takes measure nouns to have only a degree-based denotation, and Ojeda (2003), which takes them to have only an individual-based denotation. Allowing for both kinds of denotations enables us to account for the fact that we cannot use pseudopartitives in comparatives, as (4) below shows. At the same time, taking this meaning variation to be an instance of polysemy enables us to account for the fact that anaphora can support both senses – as shown in (5) below, which is parallel to example (6), where the polysemous noun *glass* is used with both its container sense and its content sense.

- (4) \*Linus is two pounds of muscle heavier than Gabby.
- (5) Linus is two pounds heavier than Gabby and it's two pounds of muscle.
- (6) [There's lemonade on the table.] Pick up a glass and drink it.

Furthermore, the proposal that measure nouns in pseudopartitives denote ordinary individuals and not abstract intervals (i.e., convex sets of degrees) on some measuring scale enables us to assign  $N_1$  of  $de$   $N_2$  pseudopartitives a syntactic structure that makes  $N_1$  the only lexical head of the main nominal extended projection of such constructions (I use extended projection in the sense of Grimshaw 2005). For example, *two pounds* in the pseudopartitive *two pounds of cheese* refers to two portions of cheese each weighing one pound – and not to an abstract two-pound interval on a pound-based weight-measuring scale. Therefore, the noun *pounds* can very well (and strictly compositionally) satisfy the semantic selection constraints contributed by the verb *eat* or by the adjective *delicious* in *Linus ate two delicious pounds of cheese*: Linus cannot eat delicious abstract intervals on a weight scale, but he can eat delicious, one-pound portions of cheese (similarly, *liters* or *bottles* can refer to portions of wine<sup>1</sup> and *pack* can refer to a number of cigarettes).

Thus, unlike much of the previous literature (e.g., Tănase-Dogaru 2007, Stavrou 2003 and references therein), I do not take such semantic selection tests to indicate that

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<sup>1</sup> To see that *bottle of wine* is like *liter of wine*, consider the following scenario (suggested by Sam Cumming, p.c.): I can truthfully say "I have drunk a bottle of wine" if I am among four people who split four bottles, even though I drank from each one (i.e., the wine I drank did not come from only one bottle).

### Measure Noun Polysemy and Monotonicity

$N_2$  is a (or: the) lexical head of a pseudopartitive construction – or that a pseudopartitive is multiply headed, with  $N_2$  a fully lexical head and  $N_1$  a (so-called) semi-lexical head. We will see that various syntactic and semantic properties of Romanian pseudopartitives provide additional evidence that  $N_1$  is (at least in certain languages) the only lexical head of the pseudopartitive main extended projection.

Finally, the paper proposes that the individual-based sense of polysemous measure nouns is related to the (basic) degree-based sense by means of a degree-to-individual meaning shift. This enables us to derive the observation in Schwarzschild (2006) that measure expressions in pseudopartitives have to be used *monotonically*.

Measure monotonicity is defined relative to the part-whole structure associated with the domain of individuals denoted by the non-measure noun (e.g., *cheese* in (2) and (3) above): a measure is used monotonically if it tracks this (contextually salient) part-whole structure, e.g., *liter* tracks the part-whole structure of *water* because, if we take two different amounts of water, each one liter in volume, and we put them together, we get more water that has a greater volume. A measure is used non-monotonically if it does not track the part-whole structure contextually associated with the domain of individuals contributed by the common noun, e.g., if we take two amounts of water, the temperature of which is 1°C, and we put them together, we get more water with the same temperature.

Schwarzschild (2006) proposes that monotonicity is the reason for the contrast in acceptability between (the English counterparts of) the Romanian  $N_1$  *de*  $N_2$  pseudopartitives in (7) and (8) below: (7) is felicitous and (8) is not because measures in pseudopartitives have to be used monotonically. Non-monotonic measures have to be expressed by means of non-pseudopartitive constructions like (9) – or (1) above.

- (7) doi litri de apă  
two.m liter.m.pl of water.f.sg  
'two liters of water'
- (8) \*două grad-e de apă  
two.f degree-f.pl of water.f.sg  
'\*two degrees of water'
- (9) apă de două grad-e  
water.f.sg of two.f degree-f.pl  
'two degree water'

The monotonicity constraint can be derived if we take measure nouns in pseudopartitives to have individual-based denotations obtained by a degree-to-individual meaning shift, because such a shift can happen only if the measuring tracks the part-whole structure of the  $N_2$  noun. Syntactically and semantically, the  $N_1$  measure noun is the head of the pseudopartitive main projection while the other nominal is the non-head, in contrast to Schwarzschild (2006), where the head/non-head categorization is reversed. That is, I take the measure noun  $N_1$  to be a relational noun, whose syntactic argument is

the [*of/de N*<sub>2</sub>] phrase and whose semantic argument is a partial ordering contributed by this phrase, consisting of a set of individuals and its associated part-whole structure.

For example, *two kilograms* in *two kilograms of cheese* is not a degree-denoting expression: it refers to two lumps of cheese, each weighing one kilogram. These two lumps, i.e., these two individuals, are individuated / identified by means of the weight measure. Individuation by measure fails in (8) because there is no way to individuate suitable individuals (i.e., materially non-overlapping portions of water) exclusively in terms of temperature measuring: such measuring does not track the water part-whole structure, so any given amount of water with a certain temperature can be partitioned into *any number* of cells. In contrast, volume-based measuring succeeds in (7) because all the water partitions it induces have the *same number* of cells, e.g., a two liter amount of water can be partitioned in many ways into liter portions, but there will always be only two portions, each one liter in volume – and, in this sense, volume is a sufficient criterion for the individuation of portions of water, while temperature is not.

## 2. Syntactic and Semantic Properties of Romanian Pseudopartitives

This section provides syntactic and semantic evidence that measure nouns are the lexical heads of Romanian pseudopartitive constructions. The first piece of evidence is provided by the number and gender agreement properties of pseudopartitives: in (10) below, the pronominal clitic *i* (they.m.pl) and the definite article *cei* (the.m.pl) agree with the measure noun *litri* (liter.m.pl) and not with *apă* (water.f.sg). In contrast, the measure expression is not the head of constructions in which measures are non-monotonic: in (11) below, the pronominal clitic *o* (it.f.sg) and the indefinite article *o* (a.f.sg) agree with *apă*.

- (10) (Cei / \*Cea) doi litri de apă,  
 (The.m.pl / \*The.f.sg) two.m liter.m.pl of water.f.sg,  
 ‘(the) two liters of water,’  
 Ion tocmai **i** = a = băut / \*a = băut = **o**.  
 John just they.Acc.m.pl=HAVE.3.sg=drunk / \*HAVE.3.sg=drunk=it.Acc.f.sg  
 ‘John just drank them.’
- (11) O (sticlă de) apă de doi litri,  
 A.f.sg (bottle.f.sg of) water.f.sg of two.m liter.m.pl,  
 ‘a two liter (bottle of) water,’  
 Ion tocmai a = băut = **o** / \*i = a = băut.  
 John just HAVE.3.sg = drunk = it.Acc.f.sg / \*they.Acc.m.pl = HAVE.3.sg = drunk  
 ‘John just drank it.’<sup>2</sup>

<sup>2</sup> Out of the blue, example (11) is slightly awkward because indefinites do not make very good sentential topics. Acceptability is improved if the topic is a definite, i.e., *apa de doi litri*, ... (the two liter water, ...). I provide the indefinite version because the gender and number morphology on the indefinite article can be distinguished from the corresponding morphology on the common noun.

### Measure Noun Polysemy and Monotonicity

Similarly, predicative adjectives always agree in gender and number with the  $N_1$  noun in both monotonic and non-monotonic uses of measure expressions, as shown in (12) and (13) below (based on an example in Tănase-Dogaru 2007).

- (12) (Cei) doi litri de apă erau vărsați / \*era vărsată.  
(The.m.pl) two.m liter.m.pl of water.f.sg were spilled.m.pl / \*was spilled.f.sg  
'(The) two liters of water were spilled.'
- (13) O apă de doi litri era vărsată / \*erau vărsați.  
A.f.sg water.f.sg of two liter.m.pl was spilled.f.sg / \*were spilled.m.pl  
'A two liter water was spilled.'

Cross-sentential anaphora instantiates the same agreement pattern:

- (14) Megan a = cumpărat doi litri de apă.  
Megan HAVE.3.sg = bought two liter.m.pl of water.f.sg  
'Megan bought two liters of water.'  
Linus i = a = vărsat / \*a = vărsat = o.  
Linus they.m.pl = HAVE.3.sg = spilled / \*HAVE.3.sg = spilled = it.f.sg  
'Linus spilled them / \*it.'
- (15) Megan a = cumpărat o apă de doi litri.  
Megan HAVE.3.sg = bought a.f.sg water.f.sg of two liter.m.pl  
'Megan bought a two liter water.'  
Linus a = vărsat = o / \*i = a = vărsat.  
Linus HAVE.3.sg = spilled=it.f.sg / \*they.m.pl= HAVE.3.sg = spilled  
'Linus spilled it / \*them.'

The topic-comment structure in (10), the predicative structure in (12) and the cross-sentential anaphora in (14) indicate that pseudopartitives refer to individuals, not intervals on a scale, and the entities they refer to are individuated by the measure expression (a count noun) and not by the other nominal expression (a mass noun).

These observations are further supported by the fact that pseudopartitives can be embedded in partitive structures, which allow only for referential, definite NPs – see (16) below.<sup>3</sup> In contrast, the  $N_2$  position in pseudopartitives is non-referential and we cannot further embed definite pseudopartitives in  $N_2$  pseudopartitive positions, as shown by the unacceptability of *de* in (16). Note also the agreement pattern: the indefinite cardinal *doi* (two) agrees in gender with the masculine *litri* (liters), not the feminine *apă* (water).

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<sup>3</sup> Distributive universal quantifiers are also acceptable in partitive constructions (see (i) below). In what sense these quantifiers are definite / referential is largely irrelevant to our present concerns; for more discussion, see Barker (1998), Ionin et al (2006) and references therein.

- (i) doi **din** fiecare cinci litri de apă  
two.m of each five liter.m.pl of water.f.sg  
two of every/each five liters of water.

- (16) doi    **din** / \***de**    cei            cinci   litri            de    apă  
 two.m of                    the.m.pl            five   liter.m.pl            of    water.f.sg  
 ‘two of the five liters of water’

Additional evidence that the  $N_1$  and  $N_2$  nouns in Romanian pseudopartitives are not part of the same extended projection is provided by the fact that they do not share the same case, as (17) below shows – unlike, for example, Greek pseudopartitives (Stavrou 2003). In Romanian, the  $N_1$  noun always bears the case of the main extended projection of the  $N_1$  *de*  $N_2$  construction, as shown by the contrast between (17) and (18).

- (17) preț-ul    litru-l-ui                                    /    un-ui            litru            de apă  
 price-the liter.m.sg-the.m.sg-**Gen** / a.m.sg-**Gen** liter.m.sg of water.f.sg.**Nom/Acc**  
 ‘the price of the liter / a liter of water’

- (18) preț-ul            apei                                    de    un                                    litru  
 price-the            water.the.f.sg.**Gen**            of    a.m.sg.**Nom/Acc**            liter.m.sg  
 ‘the price of the one liter water’

Two other uses of measure expressions provide independent evidence that we need an operation that maps their degree-based denotations to individual-based denotations. First, individual-denoting measure expressions can be used by themselves, i.e., as bare measure constructions, as shown in (19) and (20) below. Second, a measure expression can provide the restrictor of a quantifier over individuals, as (21) shows (such bare / quantified measure constructions are also felicitous in Romanian).

- (19) Megan bought two kilos of cherries and Linus already ate *one kilo*.
- (20) [Pointing at the two kilos of cherries Megan bought, Gabby says:] I only bought one kilo.
- (21) The Allies massed 3091 guns, or one to *every six yards of an eleven mile front*.<sup>4</sup>

In general, such bare / quantified measure constructions are possible only with (contextually) monotonic measures, as the contrast between (22) and (23) below shows.

- (22) \*An alarm sounded every 10°C.
- (23) The temperature was rising and so was the mercury in the thermometer. The thermometer was designed in such a way that an alarm sounded every 10°C.

As mentioned above, I take measure nouns in pseudopartitives to be relational: their syntactic argument is the *of/de*-headed phrase and their semantic argument is the partial ordering contributed by this phrase (consisting of a set of individuals and its

<sup>4</sup> <http://www.time.com/time/magazine/article/0,9171,791231-2,00.html>.

associated part-whole structure). This enables us to analyze bare measure constructions as (anaphoric) null complement constructions similar to *There was a car race and Linus won* (won the car race) or *I asked Sue to help Linus and she refused* (refused to help him).

There are various ways to extend this analysis (i) to pseudopartitive constructions in Romanian and English exhibiting different agreement properties and (ii) to languages like Greek (see Stavrou 2003), where measure expressions in pseudopartitives behave in the same way as functional items like *many, some* etc.

First, there are pseudopartitive constructions with a plural measure noun that exhibit singular agreement, e.g., the English *12 million gallons of water was pumped*<sup>5</sup> or the Romanian *Un număr (number.sg) de studenți (student.pl) mă așteptau (wait.impf.3.pl) pe hol* (A number of students were waiting for me in the hallway; example from Tănase-Dogaru 2007). Singular agreement in such constructions might be due to coercion of a plural entity into a singular group / amount / kind,<sup>6</sup> also observable with non-(pseudo)partitive constructions, e.g., *Scrambled eggs and bacon is your favorite food*<sup>7</sup> or *Seven eggs is too many for one robin to have laid*.<sup>8</sup>

As far as languages like Greek are concerned, in which measure nouns seem to be functional, determiner-like items in pseudopartitives, I will only point out that the present polysemy-based analysis provides the foundation for a grammaticalization-based account. That is, given the fact that measure nouns already shift between multiple senses, it is plausible that they can be fairly easily reanalyzed as functional items (much like the auxiliary verbs in English), i.e., instead of being relational nouns that syntactically require a phrasal complement and semantically require a partial ordering, they are reanalyzed as determiners (relational items by nature) that enforce more or less the same syntactic and semantic requirements and make more or less the same semantic contributions (e.g., the monotonicity constraint).

### **3. Measure Noun Polysemy: Degree-based and Individual-based Senses**

On one hand, measure expressions denote intervals, i.e., (convex) sets of degrees, on a particular measuring scale (see Schwarzschild 2006 among others). On the other hand, they refer to individuals. The two meanings are just different senses of the same word – i.e., this is an instance of polysemy and not homonymy, as shown by the usual tests. For example, the homonymous, a.k.a. accidentally polysemous, word *case* is infelicitous in zeugmatic discourses like (24) below, while the (logically) polysemous words *city, glass* and *newspaper* are felicitous in such discourses, as (25), (26) and (27) show (based on Green 1989 and Asher 2007). Similarly, (28), (29), (30) and (31), which involve both the degree-based and the individual-based senses of measure nouns, are also felicitous.

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<sup>5</sup> <http://www.epa.state.il.us/environmental-progress/v26/n1/cover-story.html>.

<sup>6</sup> I am indebted to Ivan Sag (p.c.) for this idea.

<sup>7</sup> [http://www.digg.com/podcasts/St\\_Anthony\\_s\\_Podcast/181810](http://www.digg.com/podcasts/St_Anthony_s_Podcast/181810).

<sup>8</sup> <http://www.learner.org/jnorth/tm/robin/FAQNestsEggs.html>.

- (24) \*The lawyer's case, which was made of genuine leather, suffered from logical flaws.
- (25) The city, which has 500,000 inhabitants, outlawed smoking in bars last year.
- (26) [There was lemonade on the table.] Sue picked up a glass and drank it in one gulp.
- (27) The newspaper Jan's reading almost went bankrupt in 1983.
- (28) The lump of cheese was two kilograms and Linus ate both of them in one sitting.
- (29) The cable's length was two meters, one of which Megan used to fix the car.
- (30) The milk in the bucket was worth ten dollars, which Gabby tucked away safely in the inner pocket of her jacket.
- (31) The milk cost Gabby the ten dollars Megan had given her.

The "distance" between different senses of a word varies (see Cruse 2000 and chapter 5 in Croft & Cruse 2004 for more discussion): at one end of the spectrum, we have the closely related "tome" / "text" meaning facets of the polysemous noun *book*, while at the other end of the spectrum we have the "food" / "people" meanings of *ham sandwich* (Nunberg 1977 and Sag 1981 among others), taken to be instances of reference shifting / sense extension and not of polysemy *stricto sensu*. The "distance" between the degree-based and individual-based senses of measure nouns seems to be located somewhere in the middle of this spectrum, in the neighborhood of the "container" / "content" polysemy exhibited by nouns like *glass*, *box* etc.

In sum, just as *bottle / glass of wine* can be used to refer to both a container and a portion of wine, *kilogram*, *liter* etc. can be used to refer to both abstract measures / scalar intervals and actual individuals / portions.

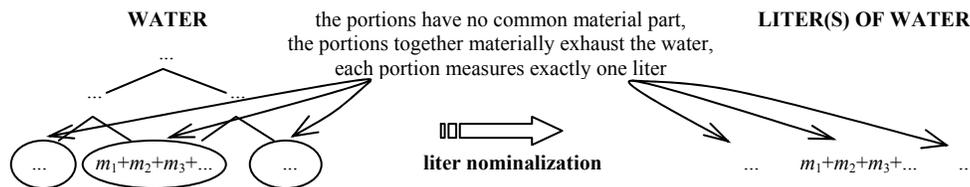
#### 4. Deriving the Monotonicity of Pseudopartitives: Individuation by Measure

I assume that nouns denoting sets of individuals always associate a part-whole structure with these sets (following Schwarzschild 2006; see also Climent 2001 and references therein): for mass nouns, this is the material-part lattice structure introduced in Link (1983); for count nouns, the part-whole structure is trivial – every individual is a part of itself and of no other individual. The basic denotations of measure nouns like *liter*, *degree* etc., are sets of scalar intervals – that is, measure nouns are predicates of intervals on the relevant scale of measuring (the *only* kind of denotation in Schwarzschild 2006).

I define the *nominalization* of a measure expression – needed for pseudopartitives – as the degree-to-individual polysemic shift by which measure expressions are associated with predicates of individuals: (i) these predicates are obtained by restricting the domain of individuals and its associated part-whole structure contributed by the  $N_2$

nominal in a pseudopartitive construction<sup>9</sup> to a sub-domain and a sub-structure that are materially equivalent (in the sense of Link 1983) to the original structure – that is, for any material part  $m$ ,  $m$  is a material part of some individual  $x$  in the original domain iff  $m$  is a material part of some individual  $y$  in the sub-domain; (ii) since *liter*, *kilogram* etc. are count nouns, the resulting sub-structure has a count part-whole structure, i.e., no two distinct elements in its domain have a common material part – thus, the resulting sub-structure is a *material partition* of the original domain of individuals (contributed by  $N_2$ ) because it is materially equivalent to it and no two elements have a common material part; (iii) the individuals that form the partition cells have to also be individuals in the original part-whole structure: five kilograms of cheese are still cheese; (iv) finally, each individual in the partition measures exactly one unit according to the measure function involved in the original degree-based denotation of the  $N_1$  measure expression.

Thus, the nominalization of a measure expression is the degree-to-individual polysemic shift that applies to a domain of individuals and its associated part-whole structure and yields a sub-domain and a sub-structure that materially partition the input domain. The output individuals measure exactly one unit according to the measure function that is part of the basic degree-based denotation of the measure expression.<sup>10</sup> For example, we obtain the denotation of *liter(s) of water* by applying the *liter* nominalization to the part-whole structure of the mass noun *water*, as shown below.



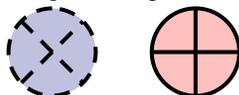
I supplement this definition of nominalization with a principle of *individuation by measure* that constrains measure-based polysemy: if there are multiple possible partitions that could in principle be the result of a measure nominalization, all such possible partitions have to have an equal number of partition cells. The intuitive justification for this principle is that, in the degree-to-individual meaning shift, the measuring has to be a *sufficient* criterion for individuation: given that any cell measures one unit (one kilogram, one liter etc.), if all the possible output partitions have the same number of cells, we can just choose any (contextually suitable) partition. For example, there are many ways to divide a lump of cheese that weighs four kilograms into four one-kilogram pieces – and, since any such division would do equally well (in a null context), we can arbitrarily choose one of them.

<sup>9</sup> The underlying domain of individuals and its associated part-whole structure are provided by  $N_2$  nominals in pseudopartitive constructions, but they can also be contextually supplied (by discourse context or utterance context), e.g., when the measure expression appears by itself, as in (19) and (20) above.

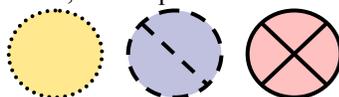
<sup>10</sup> The existence of morphemes like *worth* and *-ful*, which trigger meaning shifts from individual-based denotations to degree-based denotations (*ten dollars worth*, *a fistful of dollars*), i.e., the opposite of the measure nominalization meaning shift, brings further support to the idea that there are systematic connections between the space of degree-based meanings and the space of individual-based meanings. I am grateful to Chris Kennedy (p.c.) for this point and the following *worth* and *-ful* examples: (*we had*) *two days worth of discussion (in one day)* and *a shedful of apples*.

Individuation by measure can be satisfied only if the measure function involved in the basic denotation of the measure expression is *monotonic* relative to the part-whole structure of the underlying domain of individuals. If it is not, one cell in a given partition can correspond to any number of cells in a different partition (while preserving material equivalence), e.g., measuring the temperature of a given amount of water is not monotonic relative to the part-whole structure of the water, so we can materially partition the same amount of water in one, two or four cells, as shown below.

Partitioning a four-kilogram lump of cheese into kilograms



Partitioning a three-liter amount of water, the temperature of which is 1°C, according to temperature



Individuation by measure enables us to account for the infelicity of pseudopartitives with non-monotonic measures like the one in (8) above (*\*două grade de apă* – \*two degrees of water). Example (8) is infelicitous because either (i) the temperature of the water in the universe of discourse is not uniformly one degree and we cannot build any measure-based partition or (ii) if it so happens that the temperature of the whole water is uniformly one degree, we can build multiple, non-equinumerous partitions (one of them will have only one cell containing all the water, another one will have two cells etc.) – and this violates individuation by measure.<sup>11</sup>

Accounting for the monotonicity requirement in terms of individuation-by-measure predicts that such a requirement occurs only when a degree-to-individual meaning shift is necessary (since that is when individuation-by-measure applies). We therefore capture the fact that there is no monotonicity requirement in comparatives, as the felicitous sentence *The water was 10°C hotter than Linus expected it to be* shows – because measure expressions have their basic, degree-based denotations in comparatives.

To conclude, I will indicate how the present proposal accounts for the infelicity of pseudopartitives with singular count nouns in their  $N_2$  position, exemplified in (32) below. In fact, what we need to capture is that (32) is infelicitous *unless* it has a gruesome reading, i.e., unless we run babies / pencils through Lewis's universal grinder.

<sup>11</sup> Individuation by measure seems to incorrectly rule out pseudopartitives with indefinite measure expressions like *two pieces / bits of cheese*, since the indefinite measure noun *piece* allows for different weights / volumes for the pieces of cheese under consideration. But this does not mean that *piece* is compatible with multiple non-equinumerous partitions, thereby violating individuation by measure. We can analyze *piece* as being indefinite with respect to the measure of each of the cells in the output partition – but once we fix the measure of every cell (possibly different for different cells), all potential partitions will be equinumerous. So, the DP *two pieces* is interpreted as doubly indefinite (unlike *two pounds / liters* etc.): fix *some* measure (on the relevant scale: weight, volume etc.) for each of the cells in the target partition; then, generate some partition that respects these cell measures and select any *two* cells of that partition – these are the entities that *two pieces of cheese* refers to (e.g., a 19-gram and a 37-gram piece of cheese).

- (32) \*trei kilograme de bebeluș / creion  
\*three kilograms of baby / pencil

I take these constructions to be infelicitous because of a *proper pseudopartitivity* constraint requiring the part-whole structure induced by the measure nominalization to be a *proper* sub-structure of the underlying part-whole structure. This constraint is parallel to the *proper partitivity* constraint proposed in Barker (1998) to account for the infelicity of true partitives like \*two of my parents: this is infelicitous because people usually have at most two (biological) parents, so a plural individual consisting of two entities cannot be a proper subpart of the plural individual denoted by *my parents*.

Thus, there are two possibilities for the pseudopartitive in (32): either (i) there is at least one individual in the denotation of *baby / pencil* that does not weigh one kilo (pragmatically likely) and we cannot construct a measure-based partition or (ii) if each *baby / pencil* weighs one kilo, there can be only one partition, the same as the part-whole structure of the count noun *baby / pencil* – and we violate proper pseudopartitivity.<sup>12</sup> However, if we covertly coerce the nouns *baby / pencil* by running babies / pencils through the universal grinder, we associate a mass-like part-whole structure with these nouns and the kilogram-based partition in (32) respects the proper pseudopartitivity constraint – hence the felicitous, gruesome reading of such pseudopartitives.<sup>13</sup>

The same reasoning rules out pseudopartitives with a definite  $N_2$  like the one in (3) above (\*zece grame *de* această brînză – ten grams of this cheese). Their part-whole structure is the same as that of count nouns like *pencil* (except that there is only one individual in their denotation), so any output part-whole structure will be identical to the input one, thus violating proper pseudopartitivity. In contrast, the true partitive in (3) (*zece grame **din** această brînză*) is felicitous because the preposition *din* alters the part-whole structure of the demonstrative *această brînză* by (say) running the individual it denotes through the universal grinder and delivering a mass-like mereology.<sup>14</sup>

## 5. Future Research

The above comparison between the semantic constraints associated with *din* partitives and *de* pseudopartitives in Romanian is necessarily incomplete: Romanian has a third way of expressing part-of relations, namely genitives. For example, the genitive

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<sup>12</sup> Explaining infelicity by means of *semantic* constraints against redundancy like proper partitivity / pseudopartitivity is compatible with the observation that redundancy is acceptable in other cases (e.g., the triple singular marking in *This song rocks*) and is, in general, necessary for successful communication.

<sup>13</sup> Proper pseudopartitivity is compatible with pseudopartitives like *three centimeters of snow* (example brought to my attention by Roger Schwarzschild, p.c.), where there is only one possible cm-based partition if we measure the depth of fallen snow. That is, proper pseudopartitivity is compatible with pseudopartitives in which there is only one possible output partition, as long as this output partition is distinct from the input partition – and the output cm-based partition of snow has a count-like part-whole structure, hence it is different from the input part-whole structure contributed by the mass noun *snow*.

<sup>14</sup> The comparison between the present account (which treats partitives and pseudopartitives as semantically distinct) and the unified account proposed in Ionin et al (2006) is left for a future occasion.

construction *vîrful limbii* (the tip of the tongue) cannot be paraphrased by a *din* partitive or a *de* pseudopartitive. The distribution and interpretation of these three kinds of constructions promises to shed new light on what types of part-of relations are semantically relevant (the tip is part of the tongue in a way that is different from partitive or pseudopartitive part-of relations) and how they enter semantic composition.

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