COUNTABILITY WORKSHOP

16 and 17 September 2013

Heinrich-Heine-Universität Düsseldorf

PROGRAM
&
ABSTRACTS

HEINRICH HEINE
UNIVERSITÄT DÜSSELDORF

SFB 991

DFG Deutsche Forschungsgemeinschaft

COUNTABILITY WORKSHOP

Theoretical and empirical issues in the study of the mass-count distinction and its parallels in the verbal domain

Workshop Website

www.sfb991.uni-duesseldorf.de/countability-workshop/

Speakers

David Barner, University of California at San Diego (invited speaker)
Carmen Dobrovie-Sorin, LLF-CNRS, Université Paris 7
Jenny Doetjes, Universiteit Leiden (invited speaker)
Scott Grimm, Universitat Pompeu Fabra (invited speaker)
Manfred Krifka, Humboldt-Universität and ZAS, Berlin (invited speaker)
Charles Lam, Purdue University
Fred Landman, Tel Aviv University (invited speaker)
Henry Laycock, Queen's University (invited speaker)
Alice ter Meulen, Université de Genève
Sarah Ouwayda, University of Southern California and Université de Genève
Mike Pham, University of Chicago
Agata Renans, Universität Potsdam
Susan Rothstein, Bar-Ilan University (invited speaker)
Tobias Stadtfeld, Ruhr-Universität Bochum (invited speaker)
Timotheus Vermote, Universiteit Gent
Roberto Zamparelli, Università degli Studi di Trento (invited speaker)

Workshop Organizers

Hana Filip (Department of Linguistics & SFB 991, Heinrich-Heine-Universität)
Christian Horn (Department of Linguistics & SFB 991, Heinrich-Heine-Universität)

Workshop Venue

Location: **HEINRICH-HEINE-SAAL (SOUTH EAST CAMPUS)**
How to get there:
(a) **On foot from campus**: A 5-minute walk from the main library on university campus, just follow the workshop signs.
(b) **By bus**: Take the bus no. 835 heading towards "D-In der Steele" or the bus no. 836 heading to "D-Universität Süd", and get off at the stop "Universität Süd". From there, it is a 2-minute walk to the workshop site, just follow the workshop signs.

PROGRAM (Monday, September 16)

9:00-9:25 *Breakfast*

9:25-9:30 Opening

9:30-10:20 **Fred Landman**, Tel Aviv University (invited speaker)
Iceberg semantics

10:20-11:10 **Scott Grimm**, Universitat Pompeu Fabra (invited speaker)
Degrees of countability: A mereotopological approach

11:10-11:30 ***Coffee break***

11:30-12:20 **David Barner,** University of California at San Diego (invited speaker)
The acquisition of grammatical number and countability

12:20-13:00 **Sarah Ouwayda**, University of Southern California and Université de Genève
Re-quantity judgment: All mass DPs can count, all count DPs must

13:00-14:00 ***Lunch break***

14:00-14:50 **Roberto Zamparelli**, Università degli Studi di Trento (invited speaker)
Abstract mass nouns and mass-count conversion

14:50-15:30 **Timotheus Vermote**, Universiteit Gent
Fruits and vegetables in French: A fresh look on systematic mass-count flexibility

15:30-15:50 ***Coffee break***

15:50-16:40 **Tobias Stadtfeld**, Ruhr-Universität Bochum (invited speaker)
Annotating the countability of English nouns on a large scale

16:40-17:30 **Henry Laycock**, Queen's University (invited speaker)
What's wrong with the standard semantic model for mass nouns?

19:30 ***Conference dinner***

PROGRAM (Tuesday, September 17)

9:00-9:30 *Breakfast*

9:30-10:20 **Susan Rothstein**, Bar-Ilan University (invited speaker)
Counting, measuring, and the count/mass distinction

10:20-11:10 **Jenny Doetjes**, Universiteit Leiden (invited speaker)
Quantity systems and the count/mass distinction

11:10-11:30 ***Coffee break***

11:30-12:10 **Carmen Dobrovie-Sorin**, LLF-CNRS, Université Paris 7
Most: *The view from mass quantification*

12:10-12:50 **Alice ter Meulen**, Université de Genève
Determiners, indexical inference and aspectual adverbs

12:50-14:00 ***Lunch break***

14:00-14:40 **Mike Pham**, University of Chicago
Classifiers and class terms: How to have your subkind and count it too

14:40-15:20 **Agata Renans**, Universität Potsdam
Types of common nouns in Ga

15:20-15:40 ***Coffee break***

15:40-16:20 **Charles Lam**, Purdue University
Reduplication as summation

16:20-17:10 **Manfred Krifka**, Humboldt-Universität and ZAS, Berlin (invited speaker)
Measuring and counting in the nominal and in the verbal domain

17:10 ***Closing***

ABSTRACTS

The acquisition of grammatical number and countability

DAVID BARNER, University of California at San Diego

Most discussions of the mass-count distinction treat countability as the gold standard for evaluating the semantics of nouns. However, the reason that countability is considered a valid test is not well understood. A central assumption of this approach is that counting depends on nouns that individuate (sortals), and thus that nouns which license counting must individuate. In this talk I explore this assumption in two case studies. First, I address the relationship between number morphology and syntax and countability, and show that the acquisition of number morphology directly facilitates the acquisition of early numeral meanings. This is consistent with a link between counting and the number morphology and syntax. Second, I address the relationship between lexical semantics and countability. This work shows that, long after children have acquired mass-count syntax, they struggle to identify the countable individuals in the world that are picked out by nouns. I conclude that countability depends on an interaction between grammatical number, lexically specific individuation, and pragmatic inference, and cannot be used as a valid test without taking all three into consideration.

Most: the View from Mass Quantification

CARMEN DOBROVIE-SORIN, LLF-CNRS, Université Paris 7

1. The puzzle and its solution in a nutshell. Examples like (1a) are currently invoked in favor of the view that quantification over mass domains is allowed (Gillon 92, Higginbotham 94), but in examples like (1b), observed by Dayal and reported in Matthewson (01), quantification over mass domains is disallowed:

(1) a. Most milk from old goats is sour.
b. *Most milk in this fridge is sour.

The problem was left open by Matthewson and has not been addressed since then. My solution relies on the distinction between entity-restrictor *most* and property-restrictor *most*:

(2) a. Entity-restrictor *most* takes an entity-denoting (type e) restrictor.
b. Property-restrictor *most* takes a property-denoting (type <e,t>) restrictor.

This distinction allows us to capture the contrast between (1b) and (3):

(3) Most of the milk in this fridge is sour.

Given (2a-b), the contrast (1b) vs (3) can be captured by the generalization in (4):

(4) Entity-restrictor *most* can apply to mass domains but property-restrictor *most* cannot do so.

Examples of the type (1a) are problematic if we take the *most* that occurs in this example as having a property-denoting restrictor. The problem can be solved by adopting Matthewson's 2001 view that when occurring in the restriction of *most*, bare NPs can be kind-referring (type e). Note that my analysis, which assumes the existence of a property-restrictor *most* (see (2b)), in addition to the entity-restrictor *most*, differs from Matthewson, according to whom *most* always takes an e-type restrictor.

2. Confirming Crosslinguistic Evidence. Romanian and Hungarian are two unrelated languages in which the superlatives of MUCH/MANY can take a property-denoting NP as a complement and can have the meaning of proportional *most*. The constraint in (4) correctly predicts that in these languages, $\text{MUCH}_{\text{superl}}$ is disallowed with NPmass (see Szabolcsi 12) [Note that in both languages relative superlative readings of MOST NPmass are allowed, e.g., Rom. *Cine a bàut cel mai mult vin?* 'Who drank the most wine?']:

(5) a. *Cel mai mult lapte de capre bàtrîne e acru. ($\text{MUCH}_{\text{superl}}$)
the more much milk of goats old is sour.
b. *Cel mai mult lapte din frigiderul àsta e acru.
the more much milk in fridge this is sour.

German examples of the type *Maria hat den meisten Kaffee in dieser Kanne getrunken* 'Mary drank most of the coffee in this pot', brought up by Szabolcsi 12, seem to disconfirm our prediction. This problem can be solved by adopting Roehr's 09 hypothesis that in certain German definite DPs, the definite article originates in a lower position. Extended to *meiste*, this means that *der meiste NP* 'the most NP' is base-generated as [meiste [der NP]] 'most the NP'; this configuration obeys the constraint in (4), because the restrictor of *meiste* is a definite DP (type e).

Examples of the type in (5b) provide interesting evidence in favor of the constraint in (4) but the crosslinguistic comparison becomes truly compelling when examples of the type in (5a), which contrasts with its English counterpart in (1a), are examined. This contrast is due to a parametrical choice regarding kind-referring bare NPs. For English, the kind-referring analysis of bare NPs in the complement position of *most* is supported by the fact that in this language, bare NPs in argument positions can also be kind-referring:

(6) a. Water is liquid. b. Black cats are intelligent. c. Milk from old goats is sour.

Stage-level modifiers prevent English bare NPs from referring to kinds (recall Carlson's observations regarding *parts of this machine*), hence the unacceptability of (1a): because of the s-level modifier, *milk in this fridge* cannot be kind-referring, and a property-restrictor is ruled out by (4).

Romanian and Hungarian differ from English in that they do not allow kind-referring bare NPs in argument positions (Farkas & de Swart (2007), Dobrovie-Sorin & Beyssade (2004, 2013)), and the 'null hypothesis' is that kind-referring bare NPs are also disallowed as complements of $\text{MUCH}_{\text{superl}}$. The constraint in (4) correctly predicts that in both these languages (see Szabolcsi 12 for Hungarian) the counterparts of examples of the type in (1a) are as ungrammatical as those of (1b), because in both cases NPmass is property-denoting (type <e,t>), which is ruled out by (4). And this is indeed the case, as indicated by (5a) and (7):

(7) **Cea mai multà apà e lichidà.* 'Most water is liquid'

The intended meanings of (5a-b) and (7) can be rendered by using partitive configurations of the type 'the largest part of $\text{DP}_{\text{def/demonstr}}$' (which are the closest counterparts of English *most* of $\text{DP}_{\text{def/demonstr}}$ and *most* NP_{kind}).

[For clarification, let me briefly note that the distinction between entity restrictors and property restrictors correlates with the distinction between partitive and non-partitive restrictors in those languages (Romanian, Hungarian) in which (i) NPs are necessarily property-denoting and (ii) DP-restrictors must be marked with a partitive preposition or with morphological Case (Romanian). The correlation breaks down in English, because (i) bare NPs can be either property-denoting (type <e,t>) or kind-denoting (type e) and (ii) regardless of their denotational type, bare NPs are not marked with a partitive preposition. In line with Matthewson 01 I assume that the presence or absence of partitive prepositions or Case markers are morphosyntactically motivated but do not bear on the semantics, i.e., they are expletive (*contra* Ladusaw 82, followed by others, who assumes that partitive prepositions apply to e-type expressions and yield <e,t> type)).

3. Towards an explanation. Property-restrictor *most* is allowed with count Ns, e.g., *Most students in my class left early yesterday evening*. The same holds of *a leggtöb* NP_{count} in Hungarian (Szabolcsi 12) and of the Romanian *cei mai multi* '$most_{pl}$':

(8) Cei mai mulți studenți din clasa mea au plecat devreme. ($\text{MANY}_{\text{superl}}$)
the more many students in my class have left early.
most students in my class have left early.

According to the set-theoretical analysis of *most*, examples of the type in (8) are true iff the set of students (in my class) for which the property denoted by the VP (*leave early*) is true has a greater cardinality than the set for which the VP-property is false:

(9) $|\{x: \text{student}(x)\} \cap \{\text{left-early}(x)\}| > |\{x: \text{student}(x)\} \cap \{\text{not-left-early}(x)\}|$

The constraint in (4) may be attributed to the fact that a condition of the type in (9) cannot be checked on the mass domain. This impossibility can be attributed to the poor algebraic structure of mass domains, more precisely to the fact that meet is not defined on join semi-lattices (Szabolcsi & Zwarts 93). [The non-overlap constraint currently invoked for constraining quantification over situations (e.g., Kratzer 95 a.o.) can also be invoked here, but it merely restates the observation.]. We may thus conclude that crosslinguistically, property-restrictor MOST yields set-quantification, which is allowed in count domains but ruled out in mass domains.

Turning now to the entity-restrictor MOST, I will assume that it denotes a relation between two objects (Moravcsik 73, Roeper 83, Lonning 87, Higginbotham 94), which are respectively supplied by the restrictor and by the maximal sum obtained by applying the sigma operator (generalized join) to the scope. Given this analysis, (3) is true iff the condition in (10) is satisfied:

(10) μ ([[the milk in the fridge]] $\cap \sum x.\ \text{sour}(x)) > 1/2\ \mu$ [[the milk in the fridge]]

In words, the measure of the meet of the [[the milk in the fridge]] and (the maximal sum of the sour parts in the domain) is bigger than half of the measure of the milk in the fridge. The computation required by (10) is legitimate because in this case meet applies to two mass entities (type e) rather than to two join semi-lattices (type <e,t>). As to the measure function, we can use ratios as measure units (this is possible because size is a ratio scale (Lassiter 11)): the whole (in this case [[the milk in this fridge]] is 1 and any part of the whole is a ratio comprised between 0 and 1. The same type of computation can apply to indeterminate/infinite entities such as kinds (see (1a) or the largest-part-of-DP_{kind} in Romanian or Hungarian) since ratios can be used for measuring parts of kinds with respect to the kind itself, whose measure is 1.

In sum, the proposal made here confirms Higginbotham's view that mass quantifiers denote relations between objects rather than relations between sets, but unlike Higginbotham I crucially assume that the e-type denotation of the restrictor must be syntactically given as such, it cannot be obtained from a property-denoting restrictor via applying a default sigma-operator. If this were allowed, the contrasts examined here would not be accounted for. But it is precisely these contrasts that provide strong linguistic evidence in favor of Higginbotham's analysis of mass quantification.

Selected References

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Quantity systems and the count/mass distinction

JENNY DOETJES, Universiteit Leiden

In this talk I would like to investigate the count/mass distinction from the perspective of quantity systems. By 'quantity system' I mean a system of expressions in a given language that are used to indicate quantities. In the first part of the talk, I will focus on quantity systems in the nominal domain. At the end of the talk, I will briefly compare the nominal domain to the verbal domain from the perspective of the type of quantity system that is used.

Despite a number of important differences that have been at the core of the discussion on the count/mass distinction (systems with classifiers, with number marking and with neither, or both, of these), quantity systems in the nominal domain have a lot in common as well (Doetjes, 2012). One can observe that languages always have numerals and/or other expressions that indicate an absolute or vague number of items. In order to use these expressions, one needs to have UNITS that permit counting. These units may correspond to abstract or concrete units or to units of measurement. Languages also typically have expressions that are blind to the count/mass contrast: they are typically used to *measure* (see in particular Rothstein, 2009a, b for the distinction between measuring and counting). The possible units of measurement depend on the noun involved and on the grammatical properties of the language. Finally, one can often observe pairs of words one of which is only used in counting contexts, while the other avoids words that can be counted (cf. the distinction between *many* and *much*, (a) *few* and (a) *little* in English. The existence of roughly these three types of quantity expressions seems to hold, despite the differences that can be found across languages. This, I will argue, has consequences for the lexical properties of nouns in terms of the count/mass distinction.

When a comparison is made with the verbal domain, it can be observed that numerals and quantity expressions of the 'counting' type hardly ever allow for a direct combination with a verb phrase, and in order to use them for verb phrase modification, a classifier-like element (cf. English *times*) has to be inserted. I will claim that this is not a 'verbal classifier' but rather that the numeral and the classifier constitute a complete nominal structure that functions as an adverbial phrase. As such, counting typically makes use of nominal structures.

References

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Degrees of Countability: A Mereotopological Approach

SCOTT GRIMM, Universitat Pompeu Fabra

Most work on countability assumes a binary countable/non-countable contrast: countable nouns, such as 'dog', allow plural marking ('dogs') and accept modification by number words ('two dogs'), while non-countable nouns, such as 'sand', do not permit plural marking (*sands), nor modification involving number (*two sands). I discuss data from a range of languages which possess three or more categories of grammatical number, often distinguishing entity types such as "collective aggregates" (swarming insects, vegetation) and/or "granular aggregates" (grass, sand). From this broader cross-linguistic perspective, I then propose that the morphosyntactic organization of grammatical number systems reflects the semantic organization of noun types according to the degree of individuation of their referents. Nouns of different types are individuated to different degrees and can accordingly be ordered along a scale of individuation: substances < granular aggregates < collective aggregates < individuals. Noun types which are less individuated are on the lower end of the scale and are cross-linguistically less likely to signal grammatical number, while the converse holds for highly individuated noun types. Understanding morphosyntactic number categories in light of a scale of individuation avoids the difficulties binary accounts face, since languages may divide up the scale of individuation into any number of classes and at different points.

In the second part of the talk, I turn to the formal modeling of countability. Most formal semantic treatments of countability use mereology, or the theory of part-relations; however, I show that it turns out not to be sufficiently expressive to account for the broader typological data. I argue that it is necessary to enrich mereology with connection relations that model ways in which the referents of nouns may come together, resulting in the more expressive "mereotopology". I show that this extension leads to faithfully modeling the degrees of countability found across languages and overcomes problems in the countability literature, e.g. the "minimal parts" problem.

Measuring and counting in the nominal and in the verbal domain

MANFRED KRIFKA, Humboldt-Universität and Center for General Linguistics (ZAS), Berlin

While we find measuring constructions both in the nominal and in the verbal domain (e.g., *a liter of oil*, *walk for ten minutes*), counting constructions seem to be prototypical for the nominal domain (cf. e.g. the existence of count nouns), but more restricted in the verbal domain. They do exist, e.g. in verbal classifier constructions of the type *cough three times*, and as a side effect of nominal quantifications, as in *four thousand ships passed through the lock.* And there arguably are verbs with atomic denotations (semelfactives, achievements, accomplishments). But this is not reflected in a distinction in the count/mass domain. I will give an overview over phenomena of counting in the verbal domain, propose semantic representations for counting and related constructions, and motivate why counting is a distinguishing factor between noun and verb denotations.

Reduplication as Summation

CHARLES LAM, Purdue University

The goal of this paper is to establish a unified account for Cantonese reduplication as summation, which can predict the various interpretations across the lexical categories N(oun), V(erb) and Adj(ective).

The nominal reduplication (1a) turns individuated nominals (typically a noun preceeded by a classifier) to distributive plural DP. The reduplication of non-durative verbs (1b) denotes an iterative event. When a gradable adjective is reduplicated (1c), it denotes a diminutive, hedging meaning 'fairly tall'.

(1) a. ***bun2*** ***bun2*** *syul* **(dou1)* *ho2* *cung5*
Cl Cl book Distr very heavy
'Every book is heavy.'[1] (*subject only; distributive N*)

b. *keoi5* ***haaul*** ***haaul*** *ha5* *mun4* **(wan4* *zo2)*
3sg knock knock Dur door pass.out Perf
'S/he passed out when knocking on the door.' (*iterative event*)

c. *keoi5* ***gou1*** ***gou1*** *dei2*
3sg tall tall Prt
'S/he is fairly tall.' (*hedging, diminutive Adjective*)

This paper posits that the common thread behind these interpretations is *summation*. Building on the notions of cumulativity and quantization (Krifka, 2001; Rothstein, 2004), it will be shown that the interpretations of reduplication are predictable. Plurality and pluractionality are observed in nominal (1a) and verbal (1b) reduplication, respectively. Reduplication selects only classifiers, but not nouns. Since classifier phrases are unit-denoting, but not kind-denoting (Cheng, 2012; Zhang, 2013), the proposed summation account naturally explains why classifier reduplication such as (1a) always means 'every X'. For non-durative verbs, the reduplicated form would denote multiple, iterative events. Hence there is a parallelism between N and V: When the atomic element is individuated and quantized, reduplication results in a meaning which is a sum of these elements.

Beside the cross-category similarity, there is within-category difference among verbs. The contrast between (2) and (1b) shows that the durativity of a verbal predicate can predict the meaning of its reduplicated form.

(2) *keoi5* ***tai2*** ***tai2*** *ha5* *din6si6* **(wan4* zo2)
3sg watch watch Dur television pass.out Perf
'S/he passed out when watching TV.'

1 Abbreviations: Cl: nominal classifier; Distr: distributive marker; Dur: durative particle; Perf: perfect aspect; Prog: progressive aspect; 3sg: third person singular pronoun; Prt: hedging particle for adjectives

Reduplicating a durative predicate (2) results in a durative and prolonged event; while reduplicating a non-durative predicate (1b) results in an iterative reading. Durative predicates in Cantonese are cumulative and thus reduplication does not provide iterative reading. This paper argues that cumulativity is both necessary and sufficient to account for the cross-categorial similarities and category-internal differences. Given cumulativity defined by Krifka (2001) in (3) below:

(3) A predicate P is cumulative iff

(i) $\forall x, y\ [P(x) \wedge P(y) \rightarrow P(x \oplus y)]$
(ii) $\exists x, y\ [P(x) \wedge P(y) \rightarrow \neg x = y]$

Durative events like 'watching TV' are cumulative and do not denote individuated events, therefore they cannot be counted in the summation process. Since events like 'knock' is telic and therefore quantized and individuated, summation of such countable elements thus brings the iterative interpretation.

A challenge is to integrate the diminutive meaning associated with reduplicated adjectives into this summation account, in which a lesser degree is counter-intuitive. However, based on the fact that adjectives require degree marking, as in *keoi5 *(hou2) gou1* 'S/he is very tall', this paper argues that the adjectives in Cantonese are unindividuated and cumulative, and that there is no contradiction between summation and positive assertion. That adjective reduplication does not mean intensification in Cantonese is, in fact, predicted by this account correctly.

Since the individuation and cumulativity of atomic elements can be independently tested, e.g. by plural marking for objects or telicity tests for events, one can predict the meaning of the reduplicated forms. That is, whenever an element is individuated, it is countable by summation, as in the cases of reduplicated nominals and non-durative verb. On the contrary, because durative verbs and adjectives are cumulative, they do not give rise to iterative events or intensification in reduplication. This study shows that summation is the underlying thread connecting the different meanings that typically associate with reduplication.

Keywords: summation, reduplication, individuation, cumulativity, cross-category

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Iceberg semantics

FRED LANDMAN, Tel Aviv University

Iceberg semantics is a semantic framework in which noun interpretations are not grounded in sets of atoms but in sets of generators. The framework allows for elegant definitions of the notions of mass, count, singular, plural, and natural distinctions in the mass domain between neat mass nouns like furniture and mess mass nouns like mud. I will discuss various aspects of the semantics of mass and count nouns and noun phrases in this framework.

What's wrong with the standard semantic model for mass nouns?

HENRY LAYCOCK, Queen's University

1a. We would like to have an explanation of the distinctive behaviour, including morpho-syntactic properties, of mass nouns. Only this can afford us understanding of their behaviour.

1b. The only kind of theory or model which can offer explanations and understandings is a realistic theory – one which grounds the phenomena in the actual underlying meanings or semantic properties of words and sentences.

2. The one key principle for adequately explaining the behaviour of mass nouns is this: that they are semantically non-singular and so do not denote 'quantities' or mereological objects. The contrary assumption provides no account whatever of many aspects of their behaviour. What are commonly mistaken for singular features of mass nouns – most obviously, the absence of the plurality morpheme and the use of determiners like 'this' and 'that' – belong in reality to a non-plural subgroup of the non-singular semantic features of these nouns.

3. A systematic taxonomy of the key semantic features of both mass and count nouns, but not including semantic features of bare nouns, is represented below:

	SINGULAR	NON-SINGULAR	*reference-determiners (definite articles) and verbs*
PLURAL		*apples*	*these / are*
NON-PLURAL	*apple*	*water*	*this / is*
quantity-determiners (quantifiers, indefinite articles)	*a, an, each, every, any*	*some, all, any, most, more many / much*	*XXX*

4. A crucial subset of occurrences of nouns, both mass and count, are the bare occurrences. Typically, in English, only semantically non-singular nouns are bare. Such occurrences of nouns have a distinctive semantic content, which I call 'non-referential', and are not intrinsically limited or bounded.

5. Non-referential NPs occur in non-quantified existential contexts and are tailor-made for use with VPs displaying the aspect of activity. The concept of a non-quantified existential context requires explanation, but examples of such a sentence follow:

[a] There is blood all over the floor

[b] Water is pouring through the windows

Determiners, indexical inference and aspectual adverbs

ALICE TER MEULEN, Université de Genève

Aspectual adverbs modifying numerical determiners contribute important temporal scalar alternatives structure, creating cohesion by presupposing a stage level event serving as causal source topic, even when the subject is generic. The semantics of aspectual adverbs hence needs supplementing in information structure, when backgrounded, shared information is partitioned as past in relation to the focus information about the actual situation. This allows us to investigate indexical inference as a dynamic process, where new descriptive indexical predicates as arrive or leave are introduced in the conclusion.

The DRT semantics of the English aspectual adverbs in Smessaert & ter Meulen 2004 primarily captures the Boolean interactions between three truth-functional aspects of their meaning, based on the indexical interaction between the speech time, the current state and its past or future. The numerical scale associated with the determiner modified by the aspectual adverb *still* is decreasing into the future, whereas for *already* it is increasing. These monotonicity properties explain why (1a) is perfectly fine and coherent, as the decreasing *still* shares its monotonicity with the negative polarity *only*. But (1b) prima facie requires reinterpretation for semantic reasons, as the increasing *already* ordinarily cannot modify *only*, unless *three students* itself serves as bottom of the scalar alternatives and not the numerical determiner *zero*.

(1) a. *There are still only three students here.*
b. **There are already only three students here.*

Accordingly, the interpretation of (1a) in (2) requires first accommodating the backgrounded information in the Common Ground (CG), then the focus structure determines the set of alternatives to the current situation, and finally the asserted information that the number of students is three is added as argument.

(2) $_{D,\,cn}$ |[*There are* [$_{FOC}$ *still three*] *students here*]|$_{D',\,cn+1}$.
CG (i) there are students here => $\exists$ X [students (X) & loc(X) = l_{cn}]
(ii) students are leaving => $\exists$ Y,e [students(Y) & leave(e,Y) & e $\supset$ t_{cn}]
Focus structure: λ<n, t'> [n= |X| & n $\leq$ 3 & t'$\leq$ t_{cn}]
Focus: λ<n, t'> [n= |X| & n $\leq$ 3 & t'$\leq$ t_{cn}] (3, t_{cn})

Assuming the lexical semantics of *x leave y* in (3), we infer from (1a) using present perfect tense that some of the students, who were at the location y indexically referred to, have now left.

(3) [[***leave* (e, x, y)**]] = λ x, e (loc(x) = loc(sp_c) & ***move*** (e,x) => **F**(loc(x) $\neq$ loc(sp_c)))

The anti-veridical aspectual adverbs share the common-ground conditions and the focus structure with their veridical counterpart, but negate the focus information. Accordingly, *not yet three* will be interpreted against the same backgrounded information as *already three*, but denies that the actual number of students is three.

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Re-Quantity judgment: All mass DPs can count, all count DPs must

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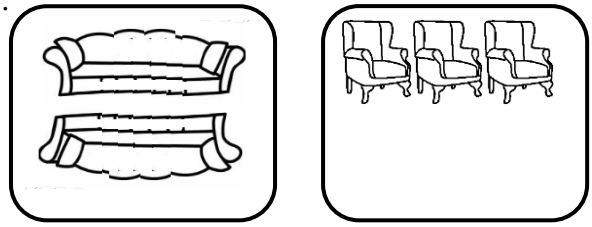
Barner and Snedeker (2005) show that at least some mass nouns can 'count' in the sense that participants use number of items when asked to compare quantities. In the present work, it is argued that this is true of all DPs with a mass, given certain biases, but that despite biases, number is used for judgment for DPs with a count syntax. We revisit Barner and Snedeker's (2005) quantity judgment experiments, with two changes:

1. Uniform perspective: Rather than comparing objects of drastically different sizes, this work invites participants to compare items of relatively similar sizes, all sized for human perspective.

2. Biasing contexts: We introduce biasing contexts that favor using number for judging quantity and ones that favor using overall volume (or function) to judge quantity, testing the same sentences in both contexts.

In a preliminary questionnaire, 6 speakers of English and 7 speakers of Lebanese Arabic were told that Room A and room B were the same size, and were asked to decide whether room A (with 2 couches) had more or less furniture than room B (with 3 chairs). More speakers judged the fuller room (A) to have more furniture, despite the smaller number of pieces of furniture.

1.  Room A Room B	2. a. Room A has more furniture than room B b. l-ouda A fiy-a faresh aktar mn l-ouda B the-room A in-it furniture more than the-room B

As it turns out, depending on the bias provided by the context, given any DP with a mass structure (containing no plural marking) the speaker used either number or of overall volume for judging quantity. This is true regardless of whether the noun is a substance mass noun (e.g. ketchup, water), an object mass noun (e.g. furniture, luggage), or a flexible nouns (e.g. stone, rope). Syntactically count DPs (books, stones), in contrast, are not susceptible to context biases, and number is always used in quantity judgment for syntactically count DPs. This is illustrated in the tables in (3)-(7).

It is therefore claimed that nouns in syntactically mass DPs are not lexically restricted, and can be pragmatically manipulated for use with discrete entities or un-individuated "stuff". Syntactically count DPs, however, are semantically individuated, and thus only allow number to guide quantity judgment. In their experiments, Barner and Snedeker (2005) report that for substance mass nouns participants used total volume but not number of objects for quantity judgment. For count nouns, number was used, and for object mass nouns, despite the mass syntax, number was also used. Noting that for mass-count flexible nouns

participants based their judgment on the DP syntax, they conclude that the visual presence of discrete objects is not enough to permit using number for quantity judgment. They thus propose that object-mass nouns have lexically specified grammatical features that normally occur in count syntax, allowing counting. We propose that preference for using number for comparing object mass nouns in Barner and Snedeker's results is due to a pragmatic bias: Comparing normal sized furniture and tiny furniture changes the perspective, leading to conceiving tiny users, and a tiny space, for the tiny furniture. The large vs. tiny bias, we propose, affects the results for artifacts, which most object mass nouns are (Grimm and Levin 2011). This perspective change does not occur for substance mass nouns which remain human usable even in tiny quantities. When the perspective is made uniform, and biases are controlled for, only count nouns resist the biases, while substance mass, object mass, and flexible nouns all allow for both number and volume comparison when in a syntactically mass DP.

3. Syntactically mass DP, object mass noun (Luggage):

Mary checks in 3 small bags,  (Mary) John checks in 2 big bags  (John)	John has more luggage than Mary (he has to pay)	Mary has more luggage than John (she has to pay)
Volume biasing context: Checked luggage is limited to 40 lbs	True	False
Number biasing context: Checked luggage is limited to two items	False	True

4. Syntactically mass DP, substance mass noun (Water):

Left box has 8 small bottles of water (4 liters total), Right box has 3 big bottles of water (6 liters total)  	There is more water in the box on the left (let's take that one)	There is more water in the box on the right (let's take that one)
Volume biasing context: Need to drink on a long trip	False	True
Number biasing context: Need to distribute water to children	True	False

5. Syntactically mass DP, flexible noun (Stone):

Mary has ten 1lb stones (10 lb total) John has four 3lb stones (12 lb total)	John has more stone to carry than Mary (complaining)	Mary has more stone to carry than John (she's complaining)
Volume biasing context: John and Mary are carrying stones in one trip	True	False
Number biasing context: John and Mary are carrying stones one stone at a time	False	True

6. Syntactically count (Stones):

Mary has ten 1lb stones (10 lb total) John has four 3lb stones (12 lb total)	John has more stones to carry than Mary (he's complain-ing)	Mary has more stones to carry than John (she's complaining)
Volume biasing context: John and Mary are carrying all their stones in one trip up the stairs	False	True
Number biasing context: John and Mary are carrying stones one stone at a time up the stairs	False	True

7. Syntactically count (Books)

John translated four short kid books Mary translated two long books	Mary translated more books than John (that's why she got paid more)	John translated more books than Mary (that's why he got paid more)
Volume biasing context: People get paid by the number of pages they translate	False	True (minus the pay part)
Number biasing context: People get paid per book	False	True

Classifiers and class terms: how to have your subkind and count it too

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Introduction. Vietnamese is commonly considered an obligatory classifier language, requiring a clas-sifier (Clf) between a numeral and a (count) noun (1) – though new survey data show that classifiers can often be omitted from counting contexts when the noun being counted is a compound (2) headed by a class term (CT), such as máy. Class terms thus appear to have classifier semantics: the restriction of the nomi-nal denotation to the set of atomic individuals within a complete atomic join-semilattice (Chierchia, 1998; Nomoto, 2013). This standard analysis cannot apply, however, because non-CT elements of CT compounds are not always nouns, and do not necessarily denote semilattices.

Proposal: Given a ClfP, [Clf NP], or CT compound, [CT X] where X indicates lack of categorical restriction on the second compound element, Clfs and CTs refer to kinds, with NPs and Xs specifying that reference to certain subkinds; the singular individuals denoted by Clfs and CTs are of these subkinds, rather than those denoted by just the rightmost element.

(1) mười *(cuốn) sách
ten CLF:VOLUME book
'ten books'

(2) mười **máy** **bay**
ten machine fly
'ten airplanes'

Class terms are nouns, such as *máy* in (2), that head compounds that comprise a taxonomy of the CT: airplanes are a type of machine. If a noun denotes a kind, then a CT compound derived from it denotes a subkind. Like bare nouns, CT compounds allow generic readings and are number-neutral (3), which Kirby (2006) shows to be impossible for true ClfP's, which are singular and never generic (4).

(3) **Máy** **báy** lẹ lắm!
machine fly quick very
'(The) Airplane(s) are/is very fast!'

(4) Cuốn sách rẻ quá!
CLF:VOLUME book cheap extremely
'A/The book is really cheap!'

Survey data show that many CT compounds can combine directly with numerals with no intervening classifier (2). The fill-in-the-blank survey asked 32 participants for classifier (or lack of) preference for 23 bare nouns and 67 total compounds with those nouns as class terms. In (5), the vertical axes indicate classifier obligatoriness for bare nouns (Yes/No) while the horizontal axes indicate classifier obligatoriness for CT compounds derived from these nouns.

(5) a. Overall totals

totals	Y	N
Y	1125	489
N	51	301

b. Overall percentages

totals	Y	N
Y	57	25
N	3	15

Compounds provide an environment for classifier omission. In an obligatory classifier language, we would expect all results to be in the top-left cell, where all nouns, bare or compound, require classifiers. The orange cell is interesting and unexpected as it shows that in a significant number of cases, classifiers were required for bare nouns but not for the compounds they headed as class terms; this implies that the compound construction itself is influencing classifier obligatoriness, rather than some [+count] feature of the nominal head that is inherited by the derived compound.

Classifiers make nouns countable by restricting their denotations to singular individuals. In countable compounds, CTs must also make individuals available for counting. However, while *cuốn* in (1) restricts the denotation of the ClfP to individual books, the verb *bay*, 'fly', in (2) does not denote a semilattice for *máy* to restrict to individuals. Instead, the individuals that comprise the semilattice are airplanes, which are denoted by the entire compound *máy bay* rather than the rightmost element.

Classifiers have semantic criteria for nouns they combine with; I follow Nomoto (2013); McCready (2009) in analyzing these criteria as conventional implicatures. An NP argument of *cuốn* should satisfy the implicated meaning that it is a type of volume. Similarly, because CTs have a taxonomic relationship to the compounds they head, any compound headed by *máy* should satisfy the implicated meaning that it is a type of machine. The crucial difference is that for [Clf NP], the conventional implicature seemingly applies only to NP, while for [CT X], the implicature applies to the entire [CT X] constituent.

CTs are nouns that acquire classifier properties within the context of compounds, assuming a N>CT>Clf grammaticalization cline (DeLancey, 1986). Specifically, while bare nouns do not have the singularizing semantics of classifiers, this meaning is incorporated into the CT during grammaticalization (von Fintel, 1995), motivating a uniform semantic analysis for both Clfs and CTs.

ClfPs and CT compounds both denote the individuals of the entire constituent, rather than just the rightmost member. Clfs and CTs refer to kinds – *cuốn* to volumes and *máy* to machines – and their modifiers, NP or X, restrict this reference to a subkind: *cuốn sách* refers to book-volumes; *máy bay* to flying-machines (airplanes). While the subkind denoted by ClfPs is entirely predictable by looking at just the NP, the subkind denoted by CT compounds is lexicalized – i.e. compounds commonly have idiomatic meaning. I notate this subkind via compounding function as MODIFIER(HEAD), where the modifier returns a subkind of the head: e.g. FLY(MACHINE) returns the subkind AIRPLANE.

The semantics of Clfs and CTs is shown in (6), modifying the classifier semantics proposed by Nomoto (2013), where precedes conventionally implicated criteria, CLASS.

6) a. $[[\text{Clf}]] = \lambda P \lambda z\ .\ (P(\text{CLASS}))(z) \wedge [\neg \exists y \in (P(\text{CLASS}))\ .\ y < z] \blacklozenge \lambda P\ .$

$P(\text{CLASS}) \subseteq \text{CLASS}$

7) b. $[[\text{CT}]] = \lambda X \lambda z\ .\ (X(\text{CLASS}))(z) \wedge [\neg \exists y \in (X(\text{CLASS}))\ .\ y < z] \blacklozenge \lambda X\ .$

$X(\text{CLASS}) \subseteq \text{CLASS}$

These semantics unify the meaning of both Clfs and CTs: both restrict denotations to singularities of the subkind denoted by the entire constituent. CT compounds differ in having lexically specified subkinds, which can be idiomatic (thus making the conventionally implicatures non-trivial); furthermore, they have no apparent restriction on the syntactic category of their modifier, indicated by 'X'. This modification of classifier semantics allows us to capture the Vietnamese CT compound facts without losing the generalizations captured by current analyses of classifiers.

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Types of common nouns in Ga

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Data from Ga (Kwa, Niger-Congo) show that the traditional distinction between count and mass nouns is an insufficient tool for describing the semantics of common nouns (CNs) across languages. I argue for three types of CNs in Ga: (1) singular and plural count nouns, (2) mass nouns, and (3) intermediate type of nouns with mixed properties. Crucially, one of the main evidences for the existence of the intermediate type of nouns is an interesting interaction between CNs and exclusive particles that to my knowledge has not been discussed in the literature yet.

DATA 1 → COUNT, MASS, INTERMEDIATE NOUNS IN GA Whereas, mass and count nouns in Ga behave in a standard way, intermediate nouns have properties of both count and mass nouns: (a) like count nouns, they can be combined with numerals without the use of classifiers, but (b) like mass nouns, they cannot be pluralized to refer to a cumulation of the NP-entities (cf. (1)). Consequently, from (2) it does not follow whether Lisa ate one potatoe or more. In this sense intermediate nouns are number-neutral.

(1) Lisa ye atomo enyɔ nyɛ
Lisa eat potatoe two yesterday
'Lisa ate two potatoes yesterday.'

(2) Lisa ye atomo nyɛ
Lisa eat potatoe yesterday
'Lisa ate potatoe(s) yesterday.'

DATA 2 → EXCLUSIVES IN GA There are (a) basic (*kome, too, pɛ*) and (b) complex exclusives (*kome pɛ, kome too*) in Ga. Interestingly, the crucial differences in their semantics start being visible when they modify different types of CNs.

DATA 3A → MASS NOUNS AND EXCLUSIVES *Kome pɛ* cannot modify mass nouns, whereas *kome too* can:

(3) Lisa ye yɔɔ *kome pɛ/ kome too nyɛ.
Lisa eat bean PART PART yesterday.
'Lisa ate only beans yesterday.'

DATA 3B → INTERMEDIATE NOUNS AND EXCLUSIVES Both *kome pɛ* and *kome too* can modify intermediate nouns. However, they give rise to different semantic effects:

(4) Lisa ye atomo (a) **kome pɛ**/ (b) kome too nyɛ.
Lisa eat potatoe(s) (a) PART (b) PART yesterday.
'Lisa ate (a) **only 1 potatoe potatoe**/(b) only potatoe(s) yesterday.'

DATA 3C → SINGULAR COUNT NOUNS AND EXCLUSIVES Both *kome too* and *kome pɛ* can modify singular count nouns. They give rise to the same semantic effect:

(5) Lisa yɛ nyemii yoo kome pɛ/ kome too.
L. have sibling woman PART PART
'Lisa has only 1 sister'.

Crucially, Lisa can also have brothers (but the number of sisters that she has is one.)

ANALYSIS 1 → CNS IN GÃ Following Krifka (1995) and Wilhelm (2008), I assume that there is a function *OU* in the denotation of numerals that accesses singularities in the CNs denotations, e.g.: [[*seven*]] = $\lambda P\lambda x[P(x)\&OU(x) = 7]$. I propose a standard semantics for **count nouns** in the line of Link (1983): count nouns denote the sublattice structures. **Mass nouns** denote a semilattice structure without the atomic elements (Link (1983), Krifka (1989), Landman (1989), Wilhelm (2008)). By contrast, **intermediate nouns** are number-neutral and hence they are modelled with the use of a full semilattice structure containing atoms and all the pluralities formed from them $\{a,b,c,a \oplus b,b \oplus c,a \oplus c,a \oplus b \oplus c\}$. Since all the elements in their denotation are compressed of discrete (atomic) entities, they are subject to counting by means of the *OU* function denoted by numerals. Intermediate nouns can refer to atomic individuals because they are present in their denotation. Moreover, they do not have to be pluralized in order to refer to the plural individuals because they are also present in their denotation.

ANALYSIS 2 → EXCLUSIVES *Kome* is analysed as a choice function (*CF*) from sets of individuals that picks a unique individual from any non-empty set in its domain. The output of the *CF* must be an atomic element. Both *pɛ* and *too* are exclusives: (a) *pɛ* is analysed as a generalized quantifier: [[pɛ]] = $\lambda P\lambda Q\forall(x)[Q(x) \rightarrow P(x)]$, whereas (b) *too* is an exclusive that in addition works as a group forming operator '↑', which maps a sum onto an atomic group individual (Landman (1996), Schwarzschild (1991)).

ANALYSIS 3A ⇒ MASS NOUNS Since all the elements in the denotation of mass nouns are compressed of non-discrete (non-atomic) entities, no element can be picked up by the *CF* function denoted by *kome*. For the same reason mass nouns cannot be modified by *kome pɛ*. By contrast in *kome too*: '↑' denoted by *too* maps sums onto atomic group individuals that can be picked up by the *CF* denoted by *kome*:

(6) yɔɔ too : $\{\uparrow(a \oplus b),\uparrow(b \oplus c),\uparrow(a \oplus c),\uparrow(a \oplus b \oplus c)\} \approx$ — *too* maps sums onto group individuals; *CF* denoted by *kome* (in *yɔɔ kome too*) picks up one of them

ANALYSIS 3B ⇒ INTERMEDIATE NOUNS Since all the elements in the denotation of intermediate nouns are compressed of discrete (atomic) entities, they can be modified byboth *kome pɛ* and *kome too*. After applying *pɛ* and *too* we obtain the following structures:

(7) atomo pɛ: $\{a,b,c,a \oplus b,a \oplus c,b \oplus c,a \oplus b \oplus c\} \approx$ only fish

(8) atomo too: $\{\uparrow(a),\uparrow(b),\uparrow(c),\uparrow(a \oplus b),\uparrow(a \oplus c),\uparrow(b \oplus c),\uparrow(a \oplus b \oplus c)\} \approx$ groups of fish only (*too* works as '↑')

From structure in (7), the *CF* denoted by *kome* can pick up only entities of cardinality 1 (atomic entites). Hence, from (4a) it follows that Lisa ate *only 1 potatoe*. From structure in (8), by contrast, the *CF* can pick up any group of any cardinality. Thus from (4b) it does not follow how many potatoes Lisa ate.

ANALYSIS 3C ⇒ SINGULAR COUNT NOUNS *Kome*, like standard numerals, generate Horn's scale. After applying *too* and *pε* to the singular count noun we obtain:

(9) nyemii yoo pε: {*a*,*b*,*c*}

(10) nyemii yoo too: {↑ (*a*),↑ (*b*),↑ (*c*)}

From both structures the *CF* denoted by kome can pick up only elements of cardinality 1. Hence in both cases Horn's scale is generated. Thus the excluded alternatives are of the form 2 sisters, 3 sisters, etc.

CONSEQUENCES AND OUTLOOK There are three types of CNs in Ga: (1) count, (2) mass, and (3) intermediate nouns. Moreover, CNs in Ga interact in an unexpected way with exclusive particles.

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Counting, measuring and the count/mass distinction

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It is generally accepted that comparison of count nouns involves comparison of cardinality values. In contrast, as recent work by Grimm (2012), Landman (2011), Rothstein and Pires de Oliveira (2012) has shown, object mass nouns such as furniture and jewellery do not force comparison of cardinalities, but allow for comparison along any contextually relevant dimension. Comparison of cardinalities is only one of the options. Pires de Oliveira and Rothstein (2011) have shown that in Brazilian Portuguese this is the case even when the object mass noun has a count counterpart, and is thus a so-called 'flexible' noun. These results raise two crucial questions (i) why do object mass nouns and count nouns differ with respect to comparison of cardinalities and (ii) if object mass nouns do allow comparison with respect to cardinalities, why do they not also allow explicit counting? In this paper I shall argue that cardinality judgments in the two cases have a different basis. With count nouns, comparison of cardinalities involves individuation and counting, whereas with object mass nouns cardinality judgments involve estimation or approximation. I argue that approximation is a form of measurement, and support this with data from Mandarin approximative constructions.

Annotating the Countability of English Nouns on a large Scale

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Resources containing detailed information on the lexical countability of English nouns are scarce. While only a few nouns and their most likely countability class are cited as examples in the literature on the count-mass distinction quite frequently, a larger lexicon with high quality annotations does not exist.

To close this gap, a reliable manual annotation of the lexical countability of nouns is necessary. Several test settings for the determination of the countability of English or German nouns were constructed. They are designed to eliminate distracting contextual influences like the universal-sorter (Bunt, 1985) or the universal-grinder (Pelletier, 1975). Using these tests and corresponding annotation guidelines, four native speakers of English identified the lexical countability of several thousand English nouns. High values achieved in an inter-annotator agreement for the annotation suggest the overall feasibility of the tests.

Annotators for example shall determine whether or not a noun in question can

i. show a mass-reading without the need for an universal-grinder context:
   a) *She ate more cake than him.*
   b) **She owns more skyscraper than him.*
ii. appear in plural and hereby establishes a hidden universal-sorter or -packager:
   a) *She owns more cars than him.*
   b) *She owns more wines than him.* (Hidden universal-sorter or -packager)
   c) **She ate more rices than him.*
iii. appear with the indefinite article:
   a) *A cat is a mammal.*
   b) **A steel is an alloy.*
iv. appear without an (indefinite) article:
   a) *Fear is an emotion.*
   b) **Bike is a means of transportation.*

While some issues concerning the annotation process, e.g. the classification of certain types of nominalizations, still remain to be solved, we took a step further in creating a high quality large scale resource on the countability of English nouns, which ultimately will allow further data-driven research on this topic.

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Fruits and vegetables in French: a fresh look on systematic mass-count flexibility

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In French, names for fruits and vegetables can generally accommodate both count and mass usages, depending on whether they are used to denote inherently bounded, individuated objects (*un citron*, *des potirons*, *trois pommes*) or edible substances, tastes, or other homogenous aspects (*du citron*, *du potiron*, *de la pomme*). Since fruits and vegetables "ontologically" are individuated objects, a naïve account of this flexibility would simply be that the count use be default, and the mass use be the result of some kind of transfer or "coercion" – in line with most accounts of, e.g., the morphosyntactic flexibility of names of "edible animals" (*cf.* Ostler & Atkins 1991, Nunberg & Zaenen 1992, Copestake & Briscoe 1995, Kleiber 1999, Nicolas 2002).

We examined this issue by conducting a vast corpus-research (based on data from WebCorp) on the actual use of names of fruits and vegetables in French. On the one hand, we looked at the behavior of the 12 most frequent nouns in the category, on the other we examined 18 lexical items taken from three distinct botanic sub-categories (*Liliaceae Allium*, *Rutaceae Citrus*, *Cucurbitaceae*). We analyzed both quantitative patterns (distribution) and qualitative patterns (semantic effects). From this study, we learnt: 1) that, besides the expected count use, nouns denoting fruits and vegetables are indeed readily used as mass nouns, with diverse semantic implications (that can be described, in essence, as an "indeterminacy in form and quantity"), and 2) that these mass occurrences, although much less frequent than their count counterparts, do not pose any problem of acceptability, with certain contexts actually requiring them. Moreover, as far as the internal coherence of the group of names under scrutiny is concerned, we observed: 1) that each item has its own distributional profile, with some (variable) degree of flexibility being the only constant, 2) that, nevertheless, the contexts most prone to mass usage are the same across items, and 3) that the notable inflexible behavior of certain "outsiders" (*ciboulette*, *ail*, *calebasse*, *cornichon*) goes hand in hand with a situation in the periphery of the (semantic-pragmatic) group of fruits and vegetables.

These observations lead us to propose an original model of the morphosyntactic flexibility of the names of fruits and vegetables (potentially applicable, mutatis mutandis, to other flexible lexical domains). We postulate that:

1. knowledge of the morphosyntactic behavior of lexical items is primarily lexicon-based, and emerges "bottom-up", from individual experience (*cf.* distributional patterns);
2. the way this distributional knowledge is applied is sensitive to (experiential) context of use and encyclopedic knowledge, which means that language users are expected to generalize morphosyntactic patterns by analogy between (permanent or episodic) members of super-lexical semantic-pragmatic categories, when relevant.

In this view, (most) nouns for fruits and vegetables in French are both mass and count, but inherit each sense in a different way. More specifically, according to what we call the 'Principle of double inheritance', they are count on the lexical level, by virtue of certain ontological characteristics of their referents, while mass as members of the pragmatic-semantic class of "fruits and vegetables" (in the common, 'culinary', sense of these terms). As such, both usages are supposedly equally part of the semantic system of the language (hence the equal acceptability), without being both 'lexicalized' – in the narrow sense of that term.

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Abstract mass nouns and mass-count conversion

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The treatment of mass ('non-countable') nouns and plural count nouns has been a central issue in semantics since Quine (1960) and Link (1983). However, till recently the semantics literature has mostly limited its analysis to a very small sample of the mass universe, often just singular nouns referring to concrete matter ("water"), plus mass nouns like "furniture" or "hair" ('mass-count nouns' in Doetjes 1997), which seem to have an at least implicit notion of atomic element.

Much less represented in the discussion are abstract nouns such as "boredom", "doom", "propaganda", which pattern like "water" in the possibility to appear as bare singulars, yet differ in various subtle respects; even a recent classification of mass nouns types (Goddard 2010), while distinguishing seven subtypes of concrete mass nouns, leaves abstract nouns completely out of the picture. Moreover, many of these can appear as both mass or count, with meaning shifts that do not easily fit into any of the canonical alternations (e.g. token-kind, container-content) frequently discussed in the literature (consider for instance the mass/count behavior of "prayer/prayers", "hope/hopes", "fear/fears", but not of e.g. "courage/??courages").

In this talk, I would like to take advantage of computational and corpus-based methods to isolate and identify abstract nouns which follow this and other patterns, discuss more and less revealing ways to extract them using syntactic patterns, and point out some intriguing similarities between abstract mass nouns and proper names.

Monday Night Conference Dinner

Im Goldenen Ring www.goldener-ring.com

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The restaurent is located in the heart of the old town ("Altstadt"), just opposite the castle tower ("Schlossturm") by the Rhein river. The best way to get there is by underground or tram (stop: "Heinrich-Heine-Allee"). From there, it is a 5-minute walk to the restaurant.