GRAMMATICAL NUMBER, NOMINAL SUBCATEGORIZATION AND TECHNIQUES FOR THE APPREHENSION OF OBJECTS. I: Objections to the traditional approach

José Luis Iturrioz Leza
Universidad de Guadalajara

RESUMEN

En este trabajo se trata de poner de manifiesto el carácter circular o contradictorio de explicaciones extralingüísticas de un fenómeno gramatical tan importante para la lengua como es la subcategorización nominal y su relación con el género y el número y por tanto con la aprenhensión de objetos. Por más que ya los clásicos del estructuralismo criticaron los intentos de presentar las categorías gramaticales como reflejo o réplica de supuestas categorías reales o psicológicas, todavía en la actualidad las descripciones gramaticales aparecen con frecuencia entremezcladas con pseudoexplicaciones ontológicas o psicologísticas. Estas categorías proceden en último término del análisis gramatical y así han podido ser empleadas también para corroborar la hipótesis de que el lenguaje determina la forma de pensar y de organizar la realidad. Mi propósito no es repetir viejos argumentos de carácter global, sino demostrar a través de una contrastación sistemática de tales teorías con las observables lingüísticas que se trata de explicaciones que, en la medida en que no son circulares, son contradictorias. En la segunda parte de este trabajo, que aparecerá en Función II/1, se añaden más argumentos que ponen de manifiesto la necesidad de un análisis operacional, tal como es llevado a cabo en el modelo UNITYP.

CONTENTS

GRAMMATICAL NUMBER, NOMINAL SUBCATEGORIZATION AND TECHNIQUES FOR THE APPREHENSION OF OBJECTS.

I. *Objections to the traditional approach.*

0. *Preliminary remarks.*

In the first number of this journal ("A functional analysis of gender...") I developed some aspects of a functional-operational conception of grammatical gender. The basic idea was that it is a formal concept (operational scheme) that cannot be described and even less explained in terms of semantic content; in interaction with number it constitutes one of the grammatical techniques for the apprehension of objects. In the second part of this article I described in detail the role that genders play in the   reification with other indicators showing an increasing assimilation of abstract nouns to the scheme of individuatives, that is to the technique GENDER/NUMBER; this process was interpreted as a programme for the constitution of second-order objects (referents, topics) in technical and scientific (formal) languages. The present article will go deeper into this approach, but now from the angle of number; it is the logical complement of the former, so that both must be considered as an organic whole in order to be duly appreciated; I am also going to pay special attention to the role played by number in the apprehension of sentences as objects. In "IN-DIVIDUATION and DETERMINATION III" (Función I/2) the pluralization of abstract nouns was analyzed from the point of view of the condensation of sentences; adjustment consists in a lot of regularities regarding the quantificative aspects of the relation that holds between the (nominalized) predicate and its arguments: the plurality of an argument can be transferred onto the abstract noun, and plurality of the abstract noun can indicate plurality of whatsoever argument. From the interaction with the other operational traits constituting the technique of ABSTRACTION (nominalization, saturation of argument places, referencing, connection with the main predicate) derives the specificity of the singular/plural opposition in this technique. We can now make further advances towards a general theory about the function of number, if we examine the way in which it interacts with the operational traits of each technique.

If the analysis of the category of gender leads inexorably to the category of number (see Hjelmslev 1956) it is equally evident that every

serious examination of number sends us back to questions related to gender. Hjelmslev believed in having discovered in the semantic notion of "consistence" (with its variations or "dimensions" (a) dynamic: "expansion vs. concentration", (b) static: "discrete state vs. compact state", (c) "global or massive vs. punctual") the concept or "general term" (the common semantic denominator) of gender and noun classes, on which number oppositions as well as aspect oppositions are based. On the other hand, Mathiot (1967) starts from the notion of "multiplicity" as the underlying concept of the category of number: its basic cognitive content would be the opposition "collocation vs. dispersion", ramifying in a lot of distinctive semantic features.

Notwithstanding the difference of starting points there is a remarkable convergence in the outcome in spite of the differences of method, neither one of the papers crosses the threshold of a serious explanation of the facts. If in the case of Hjelmslev the most remarkable deficiency is the confusion of lexical and grammatical planes in the case of Mathiot the profusion of planes and analytical categories confuses more than clarifies the fundamental task of (the technique) GENDER/NUMBER (i.e. INDIVIDUATION).

The functional interrelation of both categories has been made evident in a more suitable way in works such as Greenberg's 1972, but its full development has been possible only in the theoretical framework of UNITYP.

1. *The scale of classificative (generalizing)[1] abstraction as foundation of number and nominal subcategorization.*

In this section I will expound at length the problems arising when one tries to treat uniformly things that belong to different planes or description levels, that is by tackling grammatical questions in terms of lexical semantics or, on the contrary, by using grammatical properties to strengthen classifications and, more generally, to reinforce statements obtaining at the lexematic level of analysis. In order to set forth as briefly as possible my views concerning the irreducibility of description levels I will leave out the historical aspects of this matter and concentrate my attention on a very representative article: Hempel 1956/7.

Abstraction is usually defined as a process ordering the multiplicity of objects by eliminating special traits and thus forming by association of some essential traits the concept of species, by the association of species the concept of genus etc. in a hierarchy of more and more general concepts. 'Concrete' and 'abstract' are considered as the poles of a unique dimension or scale supposedly representing an increasing distance from the specific contents of perception. The concepts of different abstraction levels are connected by the relation of inclusion or implication: steed $\subsetneq$ horse $\subsetneq$ soliped $\subsetneq$ perisodactyl $\subsetneq$ ungulate $\subsetneq$ mammal $\subsetneq$ animal .... chains of this type can be characterized by a gradual enrichment of the extension and an inversely proportional decrease in intension.

Problems arise when this scale is applied to phenomena other than the hierarchy of concepts. On the one hand, it is maintained that the more general the concepts are, the greater is the distance from the level of perception; 'specific' is identified with 'sensorial' and 'general' with 'mental', which gives way to numerous misunderstandings and subjective appreciations; but it is glaringly obvious that the difference between *stone* and *bravery*, *animal* and *velocity* is not the same as between *bravery* and *virtue*, *velocity* and *magnitude*; only the second one can be accounted for by means of the classificative abstraction. Another difficulty is to determine which predicates come immediately above the objects (individuals); the concepts of species are not the most specific, because beneath the species one can still distinguish subspecies, races, subraces etc.

A more serious objection concerns Hempel's idea that genera are the turning point between the real and the ideal (abstract) spheres because they exist only in the human mind (1.c. 383-4): there are horses but no solipeds nor ungulates, planets but no heavenly bodies. Specific terms group individuals and are therefore still close to the perception pole: there are species only where there are individuals, i.e. "geschlossene Strukturen mit Einheischarakter" (1.c.385). According to this, terms that do not designate individuals from the point of view of a naive realism cannot be considered as specific-concrete. Even individuatives such as *Stein* "stone", *Klippe* "rock", *Berg* "mountain" arouse suspicion, given that they denote accidental assemblages of stuff lacking the one-

ness or unity of things strictly so called ("man kann von ihnen wegnehmen, ohne sie zu zerstören"). One could still talk of species in the case of events that repeat in a more or less uniform way such as *cyclones, storms, epidemics, states of mind...*; on the contrary, in the case of dividua (*substances, forces, qualities, radiations, colours, sounds*) we cannot speak of species, but only of genera:

> Alles dies sind echte Abstrakta. Die Gattung ist im
> Unterschied von den Arten immer abstrakt, da sie Un-
> gleiches zusammennimmt. Im Gebiet der Dividua setzt
> also die Abstraktion direkt oberhalb der einzelnen
> Konkreta ein, diese zusammengreifend ohne eine Zwischen-
> schaltung von Arten (1.c. 385).

Hempel's classification results as if by magic from an asystematic and capricious resort to ontological ("real"), psychological ("subjective") and grammatical criteria (number); the apparent confirmation of the idea that cognitive categories correspond to the real ones and that both are reflected in the grammatical categories (1.c. 374) involves a lot of contradictions and circularities. He has not achieved the purpose of arranging the grammatical categories in a single abstraction scale. Individuatives appear dispersed all along the scale; among his abstracts we find proper nouns (*Chrismas, Platanthera, Asperula* etc.), individuatives (*Memme* 'coward', *Schuft* 'villain'), collectives (*Pack* 'crowd', *Gesindel* 'gossip'), continuatives (*Obst* 'fruit', *Gemüse* 'vegetable', *Unkraut* 'weeds') and abstractives (*Erfolg* 'success', *Sieg* 'victory'). It's the same with the other classes.

He places collectives in a position very close to the concrete pole of the dimension, because they are

> Zusammenfassungen einer meist unbekannten Zahl gleicher
> Individuen in einem singularischen Ausdruck, womit in
> der Vielheit zugleich eine ideelle Einheit gesetzt wird.
> Eine geistige Formung also, aber keine Höherstufung, die
> wir als das Kennzeichen der echten Abstraktion ansehen
> (Hempel 1956/7: 388).

There are several types of collectives. The partial or group collectives gather a "closed plurality" of individuals of a species without

exhausting it; an indefinite, but limited plurality with recognizable
group structure, so that the plural formation is still possible: *drei
Herden von Kühen, two flocks of goats, families, herds*, etc.. The to-
tal collectives "comprise all individuals of a species, and for this
reason the formation of the plural is not possible" (l.c.388): *Chris-
tenheit, Christianity, humanity, Menschheit*, etc.. Other nouns lacking
the plural stand for an indefinite number ranging from a single indivi-
dual to the whole extension: *Vieh, cattle, ganado; Laub, follaje, folia-
ge; policía, police, Polizei; Gras, pasto, hierba, herbaje, herbage, pas-
ture...;* as a "real" characteristic, the denotation of these nouns con-
sists of perceptible unities (*blades of grass, Grashalme, policemen...*),
but it is of no consequence for the pluralizability of the nouns. Hempel
includes as well some nouns that are clearly pluralizable (*Art, Gattung,
Familie...*), in spite of their high degree of generality and despite the
fact that they do not denote individuals at all, but rather species, ge-
nera, families, sorts, kinds, etc.[2]; a similar contradiction can be ob-
served in other cases such as *Christianity - association*, etc.. For Hem-
pel the structural parallelism between *von Wald bedeckt* and *von Wasser
bedeckt, there is   fish* and *there is coal* merely points to the proximi-
ty of the categories 'collective' and 'mass' in the scale; certain "real"
differences between the objects prevents him from recognizing that *Wald*
and *fish* are in this use real mass nouns (from the grammatical point of
view).

The so-called comprehensives designate a heterogeneous accumulation
of events of great spacial and temporal extension; each one of them
could be perceived in the space, but the set as such goes beyond the fra-
me of human perception: *war, feast, wedding, carnaval, harvest...* Hem-
pel distinguishes in addition the group of "complex objects" (l.c.392).
i.e. material aggregates with a certain operative structure: *hamlet,
ranch, business, manufacture, science, state...*

From this we can conclude that the "real" (ontological) category
'collective' has very little to do with the grammatical facts; among
the nouns associated with this category we find not only collectives,
but also individuatives, continuatives, abstractives and even proper
nouns (*Nasa, Pemex, Renaissance, Mannesmann...*). An agreement between
the "real" and the grammatical categories can be reached only by means
of denying that they are true individuatives, continuatives, etc., i.e.

by means of overlooking their grammatical properties:

> Wenn wir festhalten,dass Kollektiva über das Gegebene
> nicht hinausgehen und nur zusammenfassen, was natür-
> licherweise zusammengehört, dann handelt es sich nicht
> mehr um eigentliche Kollektiva. Ähnliche Abstrakta
> sind auch Sumpfflora, Steppenflora, Viehstand, Werkzeng,
> Schanzzeng, Kroppzeug (l.c. 390).

The fact that a war is a sequence of battles doesn't bring as a consequen-
ce that *war* is a collective; the word *skeleton* is not a collective noun
in spite of the fact that it denotes a set of bones, nor a genus even-
though it denotes bones of different kinds. The grammatical structure is
not determined by perception, not even by the concepts of lexical seman-
tics. There is certainly a correlation between the hierarchy of semantic
concepts and the grammaticality scale of the techniques for the apprehen-
sion of objects (semanticity, predicativity, transparency, motivation),
but that's quite another matter.

Collectives are for Hempel and in general for the traditional theory
of grammar "primitives Sprachgut", they are supposed to be older and less
abstract than the morphological opposition singular-plural:

> Man kann den Unterschied beider Verfahren auch darin
> bestimmen, dass Kolligierung eine Gestalthafte Gesamt-
> auffassung von Mehrheit voraussetzt und festhält,
> Pluralisierung schon durch den Gegensatz zum Singular
> auf distributive Auffassung hinführt. (Hempel 1956/7:
> 390).

There is a contradiction between conceiving individuatives as the con-
crete pole of the dimension and holding that the opposition singular-plu-
ral is their most remarkable property. In order to find a way out of this
contradiction a clear distinction must be made between the lexical meaning
and the (metalinguistic) meaning of grammatical means; they belong to
different semiotic levels.[3]

The inconsistency of the classification becomes even more evident
in the case of abstractives. Hempel admits that it is difficult to assign
them a place in the scale:

In einer graphischen Darstellung, die eindeutige Kon-
kreta und eindeutige Abstrakta als Grenzpunkte einer
Linie nähme, würde der Ort unserer Konversa schwerlich
anders anzugeben sein als in der Nähe des konkreten
Pols (l.c.387).

but he is inclined to believe that they are close to the concrete pole,
what unavoidably leads to contradictions. If conversion is admittedly a
purely syntactic (formal) phenomenon, it is senseless to try to place
abstractives en bloc in a position of the scale; conversion doesn't chan-
ge the degree of concreteness of the underlying verbs, adjectives or nouns:

Rot und *Röte*, *gehen* und *Gang* zeigen keinen Unterschied in
der Höhe des Denkansatzes, sondern nur in der sprachlichen
Formung (Hempel l.c.386).

In view of the fact, however, that this grammatical procedure can also
be applied to nouns (*Vaterschaft*, *Rittertum*, *Subjektheit*; *professorship*,
professorate, *chaplaincy*) the change of lexical category cannot be consi-
dered as the only relevant aspect.

If Hempel believes that the word 'abstract' has at least two meanings
that do not even deserve the same name and recognizes that among "abstracts
in the old sense" (distance from the perception level, "wahrnehmungsfern,
weil gedanklich höhergestuft") there are as many concrete as abstract nouns,
one doesn't quite understand why he persists in reducing one to the other.
The cause is the confusion of semiotic levels (lexical meaning vs. gramma-
tical means of INDIVIDUATION) as well as the confusion of grammatical pro-
perties and extralinguistic properties. For example, the fact that nouns
like *redness* lack the number opposition is viewed as a consequence of the
fact that qualities cannot form species, i.e. sets of individuals:

Von einem Rot gibt es überhaupt keine Individuen, sondern
nur verschiedene Vorkommen. Ich kann wohl aus verschiede-
nen Spielarten von 'Rot' den Sammelbegriff 'Rotnuancen'
bilden, der aber keine Art, sondern allenfalls eine Gattung
wäre, da er nicht Gleiches, sondern Verschiedenes zusammen-
fasste. Sein Anderssein verrät schon der Plural; Qualitäts-
begriffe treten nicht als Plural auf. (l.c. 385).

Nonetheless number does not prevent raising *Stein*, *Klippe*, etc. to the
position of abstracts and holding *Erfolg*, *Sieg*, *Sünde*, etc., in the sa-
me position.

The specific sense in which nouns like *Erfolg*, *Sieg*, etc. may be
viewed as abstracts and the special effects brought about by number in
them have to do with the fact that they condense, i.e., reify proposi-
tional contents.[4] In Iturrioz 1986/SMF genders are described as indicators
of different steps of reification; given the inherent functional connec-
tion of gender and number, gender is also involved in the task of INDI-
VIDUATION.

In order to escape these contradictions or inconsistencies (a) it is
necessary to distinguish other types of abstraction from the one associa-
ted with the generalization scale, (b) it is necesary to distinguish bet-
ween the lexical and grammatical levels, because they imply different
abstraction scales, (c) the individualizing function of number and thus
the non-individuated character of a class of nouns must be distinguished
from the semantic content of the lexemes to which the technique GENDER/
NUMBER is applied. The statement that a noun does not designate indivi-
duals can be understood in the sense that it is not inherently individua-
ted or in the sense that it designates other (abstract) things such as
kinds of different levels (species, genera, families, etc.).

It is an untenable exaggeration to say that nouns like *insect* or
animal do not designate individuals, but only higher order entities. The-
re is nevertheless a correlation between the levels of generality inherent
to the lexical meaning and the tendency to understand NPs such as *two
mammals*, *three insects*, *many animals* as denoting individuals belonging
to different kinds (not necessarily different kinds). On the other side
specific terms can also designate kinds insofar as they can appear in a
typifying statement[5]:

(1) *Columbus brought the horse to America*

This sort of generic sentences cannot be translated into the formal lan-
guage of logic by means of the universal quantifier ($\neq \Lambda x\ Cx \rightarrow Bcx$). From

this one might conclude that they belong to a second order operational
level eventhough there are not overt metalinguistic operators such as
lambda, *species*, etc.. However the plural remits to the lower semiotic
level: one could hardly understand (2-3) as referring to several/many
races, not even in suitable contexts:

(2) *Columbus brought several horses to America*

(3) *? Many horses are in danger of extinction*

For other terms this is on the contrary the most obvious type of inter-
pretation

(4) *Many mammals are in danger of extinction*

(5) *Columbus brought several mammals to America*

It seems that the possibility of individuative readings decreases at
the higher levels; one would not speak of *many animals*, etc., if one
knows that they belong to the same taxon

(6) *Columbus brought many animals to America*

(7) *They have many animals at the ranch*

Unlike *horse* in (1) the more general concepts do not trigger a typifying
generic reading:

(8)? *The primate is larger than the crustacean*

(9)? *The ruminant has cloven hoofs*[6]

The constraints derive also partly from the dimension of descriptivity
(NOMINATION); nouns tend to become more descriptive the more general they
are; they are frequently derived from other more specific nouns *gramineae,
graminaceae, orchidaceae, bovidae, rosaceae...*), loanwords, compounds
(Ger. *Rosengewächse, Menschenaffen, mankind*), noun phrases having as nu-
cleus operators such as *family, genus,* etc., i.e. exponents of second or-
der (formal) classificatory operations (*groups of animals, group of allied
genera...*). All this shows that the concepts are more "recent" from the
grammatical as well as from the epistemological point of view, that they

result from reflective operations yielding equivalence classes less
accessible to direct observation. This sort of expressions are frequent-
ly used for the nomination of kinds that died out in prehistoric periods,
what is also an evidence of the induced condition of the classification
(*mastodon, diplodocus, dinosaur, pterodactyl...*). All these terms have
at least in the original languages, a closer resemblance to propositions,
to "analytical" statements than to labeling expressions. They are often
used only in the plural as though a true unity has not yet been "synthe-
sized".

It is obvious that these characteristics are not shared by nouns li-
ke *Stein* 'stone', *Klippe* 'rock', *Berg* 'mountain' etc.. The following facts
are also inconsistent with Hempel's ontological approach. The German
word *Tuch* has two plurals; at first glance it seems reasonable to state
that they correspond to two different meanings of the word (or that the
word designates two different objects); the one that corresponds to the
category of mass nouns and fits the feature "generic" according to Hem-
pel, would be "specific". But let us take a good look at the definitions
(taken from Wahrig: *Deutsches Wörterbuch*):

TUCHE. *Streichgarngewebe in Leinwand-, Köper- oder Atlasbindung.*
TÜCHER. *Gesäumtes Stück Stoff.*

To state that there are two different meanings and that one of them belongs
to a higher generality level doesn't explain why *Bindung*, 'form of knitting ,
weaving' and *Stoff* 'fabric, cloth' correspond "semantically" only to *Tuche*,
why *Gewebe* is not pluralizable in either sense and why *ein Stück Stoff* 'a
piece of cloth' is correct but not *ein Stück Atlasbindung*. This kind of
differences has to do exclusively with the structure or internal form of
the language. If the nouns appearing in the definitions seem to confirm the
principle according to which collective and mass nouns are more general than
individuatives, the opposite is true in the following definitions:

OBST. Als Nahrung dienende *Früchte* (Spa. *fruta-frutos*, Eng. *fruit-
fruit/fruits*)

GEMUESE.   Essbare *Pflanzen* (Spa. *verdura/hortaliza-plantas*, Eng. *ve-getables-plants*).

UNGEZIEFER.   Tierische *Schädlinge* und *Schmarotzer*...

The same goes for the English pairs *foliage-leaves*, *herbage-herbaceous plants*, *goods-merchandise*, *knitwear-knitted goods* or for Spanish *fruta-fruto*, *madera-madero*, *leña-leño*, *grilla-grillo*, *polaca-polaco*, *porra-porro*, *temática-tema*, *conflictiva-conflicto*, etc.. In the following pairs there is also a discrepancy between the grammatical characteristics and the levels of abstraction (in the strict sense, not in the broad sense of "generality", "Allgemeinheit"): *bravery/valentía/Tapferkeit* vs. *virtue/virtud/Tugend*, *red/rojo/Rot* vs. *colour/color/Farbe*, *velocity/velocidad/Geschwindigkeit* vs. *magnitude/magnitud/Grösse*, *horse/caballo/Pferd* vs. *species/especie/Art*, *rose/rosa/Rose* vs. *genus/género/Gattung*, *rosaceae* vs. *family*....The second element is in all cases a second order individuative noun classifying first-order concepts apprehended as objects.[7]

2.   *The wrong inferences resulting from the ontological or object-predicative misinterpretation of number as subcategorizational feature.*

All attempts to find an explanation of "nouniness" and nominal subcategorization on a preconceived concept of object necessarily fail. When the various noun categories are said to designate different kinds of things many contradictions and circularities emanate from the fact that semantic traits are adduced by way of explaining grammatical properties that were claimed previously to be semantic properties, so that a fact serves as its own explanation. If semantic traits in turn are assumed to reflect real categories a new link is added to the circle.

It is maintained for example that nouns designating a mass lack, for the very reason that they designate a mass, the opposition singular-plural, and that in the domain of nouns designating concrete objects or individual persons the alternance of numbers plays in an unrestricted way. Thus it is taken for granted that the grammatical category of number directly reflects properties of the denoted entities. At the same time one observes that nouns

can change from a subcategory to another; one should accordingly admit that this change produces a change in denotation or meaning ("*three beers* means in reality *three bottles of beer*", etc.). It is an approach to the problem from the wrong angle when one postulates that it is not so much a difference in the denotation as a difference in the conception of the world (*the rope* can be conceived as a thing or as a mass") as long as there is no other evidence than that emanating from the linguistic facts that should be explained. Any attempt to reduce formal concepts to "real" or semantic categories necessarily has to be circular or contradictory. A further difficulty is that nouns pass so frequently from a category to another that we would be led to consider almost all nouns as polysemic. Here are a little sample:

A. MASS NOUN	INDIVIDUAL NOUN
(10)a. *A little more cheese* *Un poco más de queso* *Ein bisschen mehr Käse*	b.*Two big cheeses* *Dos quesos grandes* *(Zwei grosse Käselaibe)*[a]
(11)a. *It is hard as iron* *Es duro como (el) hierro* *Es ist hart wie Eisen*	b.*A hot iron* *Un hierro candente* *Ein heisses Eisen*
(12)a. *Bebe mucha cerveza* *Er trinkt reichlich Bier* *He drinks lots of beer*	b.*Bebió muchas cervezas* *Er trank drei Bier* *Ha drank many beers*
(13)a. *Kork ist leichter als Wasser* *Cork is lighter than water* *El corcho es más ligero que el agua*	b.*Wir heben 3 Korken für 4 Flaschen* *We have 3 corks for 4 bottles* *Tenemos 3 corchos para 4 botellas*
(14)a. *A parcel in brown paper* *Ein Päckchen in braunem Papier* *Un paquete en papel marrón*	b.*Working papers* *Arbeitspapiere* *Repasa los papeles*
(15)a. *He has more car than garage* *Tiene más coche que cochera* *Er hat mehr Auto als Garage*	b.*He has more garages than cars* *Tiene más cocheras que coches* *Er hat mehr Garagen als Autos*
B. (ABSTRACT) MASS NOUN	(ABSTRACT) INDIVIDUAL NOUN
(16)a. *Viel Erfahrung* *Much experience* *Mucha experiencia*	b.*Viele Erfahrungen* *Many experiences* *Muchas experiencias*

(17)a. *La juventud está hoy más expuesta que nunca a las numerosas influencias de culturas ajenas.*

Die Jugend ist heute stärker denn je zahlreichen Einflüssen aus fremden Kulturen ausgesetzt.

Nowadays youth is exposed to numerous influences of foreign cultures.

b. *Los niños están hoy expuestos a la fuerte influencia de los medios de comunicación.*

Kinder sind heute dem starken Einfluss der Massenmedien ausgesetzt.

Nowadays children are exposed to the strong influence of the mass media.

(18)a. *Zu wenig Kritik bringt manche Leute aus der Fassung.*
Demasiado poca crítica pone a algunas personas nerviosas.

b. *Die vielen wohlwollenden Kritiken haben ihn fassungslos gemacht.*
Las muchas críticas benévolas lo han dejado perplejo.

(19) *There is/are good reason/reasons for believing that this theory is not tenable.*

Es gibt guten Grund/gute Gründe zu der Annahme, dass diese Theorie nicht aufrechterhalten werden kann.

Hay buena(s) razón(es) para creer que esta teoría no se puede mantener.

C. PROPER NOUN	INDIVIDUAL NOUN
(20)a. *Rockefeller era un pobre hombre*	b. *No soy ningun Rockefeller*
(21)a. *Dresden ist eine alte Stadt*	b. *Dieses Dorf ist ein kleines Dresden*
(22)a. *Cadillac is a trademark*	b. *He has three Cadillacs*

Can we deduce from this example that <u>Brot</u> as a mass noun (*ein Stück Brot* 'a piece of bread', *Brot ist Freiheit* 'bread is freedom') and <u>Brot</u> as *Brotlaib* 'loaf of bread' mean two different things? Certainly not. *Brot* as a mass noun doesn't mean the dough bread is made of, but the bread itself. The same holds for Spanish *pan* in *¿Cuánto pan has comprado?* 'How much bread have you bought?' vs. *¿Cuántos panes has comprado?* 'How many loaves have you bought?'. To each one of the aforementioned lexemes should be assigned the trait [±countable] as well as the opposite [-countable], that is they should be regarded as ambiguous.

In Wahrig's *Deutsches Wörterbuch* the meaning of some nouns is stated in twofold definitions like these:

Haar: a. Fadenförmige Gebilde auf der Haut von Tieren und Menschen

b. Gesamtheit der Haare

Papier: a. (zählbar) Schrifstück, Ausweis, Urkunkde; zettel; Aufzeichnung; Wertpapier, Aktie, Pfanbried *(Keine Papiere bei sich haben)*

b. (unzählbar) Durch Faserverfilzung entstandenes, blattartiges Gebilde zum Schreiben, Drucken, Einpacken *(ein Blatt/Fetzen/Stück/Bogen ∿)*

Gerät: a. Werkzeug, z.B. Hammer, Zange; Ausrüstungs-, Gebrauchsgegenstand, Instrument (Acker-, Handwerks-, Haus-, Küchen-); Vorrichtung *(Turn-).*

b. Mehrere zusammengehörige Gebrauchsgegenstände, Zubehör, Utensilien (Schreib-)...

In other languages this duality is found maybe to the same extent, but not necessarily in the same lexical entries:

Pelo: a. Cada uno de ciertos apéndices a modo de hilos o hebras... que cubren parcial o totalmente la piel del hombre y de muchos animales

b. Conjunto de tales apéndices. Usase también en plural

Herramienta:
a. Instrumento metálico de trabajo

b. Juego de instrumentos de esa clase o conjunto de ellos.

Hair: a. One of the fine filaments growing from skin of animals, especially from human head

b. (Collective singular) all the fine filaments....

In Spanish *cabello* shows the same duality as the synonym *pelo*; in French two different lexemes are used:

Poil: a. Production filiforme sur la peau des animaux et en divers endroits du corps humain

b. Pelage (ensemble des poils de la robe d'un animal)

Cheveux: Poils de la tête de l'homme

The former is as ambiguous as *pelo*, *Haar*, *hair* while the latter is used on-
ly in the plural and has a more restricted meaning (more intension, less ex-
tension); a similar semantic difference exists between *poil a.* and *poil b.*,
the latter being the complement of *cheveux*, while the plural *polis* applies
to animals as well as to persons; in addition to this the collective noun
chevelure has the same lexical meaning as the plural noun *cheveux*; on the
other hand the English plural *hairs* in collective sense is archaic, while
the corresponding plural of the other languages is not subject to such a
restriction. If we take into consideration all these facts we come to the
conclusion that we are concerned primarily with formal grammatical diffe-
rences, by no means with differences in lexical meaning or in denotation.
The following chart affords a general survey of the main aspects concerning
the relation between grammar and lexical meaning.

	SG_1	SG_c	PL_1	PL_c	TR
human	Haar, hair pelo, poil	Haar, hair pelo, poil	Haare, hairs pelos, poils	Haare, *hairs pelos, cheveux	caballera chevelure
beast	Haar, hair pelo, poil	Haar, hair pelo, *poil	Haare, hairs pelos, poils	Haare, *hairs pelos, *cheveux	coat, fur pelage, pelaje

The semantic differences only in part may be accounted for in form of selectio-
nal restrictions (so also in the case of *Papier a.* and *Gerät*, see *hoja* below),
but they do not correspond to or depend on grammatical concepts such as 'indi-
viduative singular/plural', collective singular/plural','transnumeral'(collec-
tive noun or mass noun); the various readings of *Papier*, *Gerät*, etc., defy
classification by means of these metalinguistic concepts; the specific readings
of *Papier a.* cannot be deduced having as premiss the fact that the noun is coun-
table; what these readings have in common, if there is a common semantic fea-
ture, is not the set of features shared by all the readings of *hoja a.*:

> *hoja:* a. Cada uno de los órganos... de que se cubren los árboles y
> demás vegetales// Pétalo// Plancha o lámina fina de mu-
> chissimas materias// Cuchilla de arma o herramienta cortan-
> te y por extensión en algunas cosas el arma entera// Cada
> una de las planchas giratorias que sirven para cerrar el
> vano de una puerta o ventana// Cada uno de los grados que
> se establecen para clasificar el vino.

> b. Conjunto de las hojas de un árbol o bosque, follaje.

In addition to this there is no noticeable difference between the readings of
Gerät a. and *Gerät b.*, while only for the first reading of *hoja a.* there is a
corresponding collective/continuative reading of the singular. *Werkzeug*, *Gerät*
and *herramienta* have a very singular lexical meaning and share all the rele-
vant grammatical features. *Hausrat* may be said to denote the same things or
to be synonymous with *Hausgerät*, in spite of which it is not pluralizable. To
sum up: sometimes the opposition a./b. does not entail any other semantic diffe-
rence; in other cases there is a unique sense in b. in contrast with many read-
ings in a.. The lexical meaning proper does not permit any inference with re-
gard to the presence of the feature [± countable]; this feature in turn does
not imply any other feature belonging to the object-predicative content of
the lexeme. From this we cannot deduce that the opposition a./b. plays in a
free, unrestricted way. On the contrary, the use of the singular as a collec-
tive or mass noun is not very frequent, it is not regular and predictable,
and for this reason it must be registered in the lexicon; but one is mistaken
in thinking that thereby grammatical traits are put on the same level with
object-predicative features; they must be regarded as grammatical i.e. metapre-
dicative information in the lexicon; object-predicative and metapredicative
features belong to two different semiotic levels.

At any rate a. and b. are not different object-predicative meanings,
but two modes of meaning, two ways of apprehending objects, two "sprachliche
Zugriffe" in the words of Weisgerber; they can be expressed by means of a
lexematic opposition (*poil-cheveux*, *poil-pelage*, *hair-pelage*; *hoja-follaje*,
leaves-foliage, *Blatt-Laub*, *leaf-foliage*), syntactic operations (*eine Herde
Keihe*, *a harras of horses*), derivation[9](*Balken-Gebäck*, *leaf-leavage*) or by
means of the fusional technique (*leaf/leaves* vs *leaf*, *Gerät/Geräte* vs. *Gerät*,
pelo/pelos vs. *pelo*).

It is wrong to claim a change in the lexical meaning or in the degree of
generalization; this kind of "polysemy" must be accounted for in grammar, name-
ly in terms of the apprehension techniques applied to the same lexical con-
cepts. Eventhough it is not wrong to state that in a. "car" is treated as a
mass, whereas in b. it is presented as a class of individuals, "mass" and
"individuals" must be understood as pointing to formal schemata constituting
the internal structure of the language; they musn't be mistaken for real ca-
tegories of the outward things (different types of denotations) nor for diffe-

rent generalization levels inherent to the lexical meaning.

The complexity of the formal facts cannot be adequately arranged and accounted for by means of a rigid association with a few absolute content categories. The conception of language as a nomenclature or set of labels for attaching to objects proves to be a mistake at the level of lexematic structures[10]; it is all the more wrong with regard to grammatical structures; in either case it results in an atomization of language, in a segmentation of the discourse in discrete elements, "la segmentation de l'énoncé en éléments discrets no conduit pas plus à une analyse de la langue que la segmentation de l'univers physique ne mène à une théorie du monde physique"[11]. The idea that individuals, kinds, sets, masses, actions and properties preexist language (and thought) and are the decisive factor of the subcategorization of nouns into individuatives, collectives continuatives and abstracts falls into the realm of the absurd.

It is of no moment that the definitions of Ger. *Laub, Röhricht, Hausrat, Gras, Tuch, Obst, Gemüse, Ungezierfer* (see above), *Gerät*, Fren. *poil*, Eng. *hair*, Spa. *hoja, herramienta*, etc., contain only nouns of the same subcategory (*conjunto de...* for *pelo b.* and *hoja b., juego de ..*for *herramienta b., Zubehör* for *Gerät b., Gesamtheit* for *Haar b.*). There is no contradiction in defining the object-predicative meaning of *poil a.* by means of the collective or mass noun *production*, of *Gerät b.* by means of *Pflanzen*, etc.. The tendency to reproduce in the main words of the definitions the grammatical properties reflects the widespread confusion of object-predicative and metapredicative nformation; it can be understood also as a practical and ingenious way of referring back to the grammatical code.

Collective nouns have the property grasped in the second part of the following definition taken from the Duden-Grammatik:

> Sie fassen als singularisches Substantiv gleichgeartete
> Dinge oder Lebewesen zusammen; mit ihnen kann das ein-
> zelne Stück nicht genannt werden. (Grebe et al. 1966:136).

The reason has to be found within the language, which has other means available for the designation of the singular elements the collection or mass is composed of; no difference observed in the things themselves can serve as justification or explanation of the functional difference between *Hausrat* and *Hausgerät* or between the different uses of *Gerät, Werkzeug, Spielzeug, Rohr, hoja, herramienta, pelo*, etc..

(20) *Los árboles están perdiendo la hoja* (= Ger. *Laub*)

(21) *Wir haben die Möglichkeit, derartiges Gerät herzustellen* (Spa. *utillaje, enseres*). Also: *derartige Geräte*.

(22) *Die Handwerker haben ihr Werkzeug mitgebracht*. (Also: *ihre Werkzeuge; su herramienta, sus herramientas*).

(23) *Aus Rohr geflochtene Gartenstühle*

Languages do not show the same variability in all cases: *much knowledge* has to be translated into German as *viele Kenntnisse*, into Spanish as *muchos conocimientos*. Words designating animals (and to a lesser extent plants) that satisfy human needs present with a certain regularity the formal duality in question:

(24)a. *Gestern haben wir Lamm (Fisch....) gegessen*
       Ayer comimos cordero (pescado....)
       Yesterday we ate lam (fish....)

   b. *Hier werden nur Lämmer (Fische....) geschlachtet (verkauft...)*
      Aqui se matan sólo corderos (vacas....)
      Yesterday we slaughtered three lambs

The opposition between the mass noun *fish* and the individuative noun *fish* is expressed in Spanish[12] by means of a lexical pair: *pez* is an individualizing noun and *pescado* serves as a mass noun for the flesh of fish; in addition to this the mass noun *pesca* designates fish/fishes as catch or an amount of fish caught:

(25)a. *There are a lot of fish in these parts*
   b. *Aquí hay mucha pesca*

The grammatical oppositions, as far as they take the form of a fusional technique, are not associated with object-predicative features to the same firmness as the lexical oppositions; in (25a) *fish* takes the form of a mass noun in spite of the fact that it denotes individual animals living in the water

(the plural verb reinforces this point). One can say that he is catching
fish fully aware that he is catching individual fishes. In contrast, one
will never say:

(26) * *En el tianguis habia mucha pesca*

(27) * *Comemos mucha pesca*

(28) * *He slaughtered three veals (or* simply:*veal)*

(29) * *He is eating calf*

The difference between mass nouns (transnumeral) and individuatives
cannot be explained by referring back to the lexical feature [± living] or
to the lexical pair *flesh-meat*, Fre. *chair-viande*, not even to the pair
pez-pescado. In addition a more general objection can be raised; an other
particular semantic feature might be proposed for nouns like Eng. *grain*, *ce-
real*, *corn*, Ger. *Korn*, *Getreide*, Span. *grano*, *cereal*, etc., because the a-
forementioned features are not suitable; if one says that *Korn*, *grano*, *corn*,
grain as mass nouns have the meaning of *Getreide*, *cereal* and that they mean
as individuatives the singular corns or grains or seeds of different kinds of
grain used for human food, the same difficulties arise as in the foregoing
cases. And this explanation in turn is not suitable for new expressions like
Sand-, *Hagel-*, *Salz-*, *Staubkörner*; *granos de arena*, *de granizo*, *de sal*, *de
polvo*; *grains of salt*, *gold*, *sand*, *gunpowder*, *incense*, etc.. The meaning of
grain might be described now as "small hard particles which *sand*, *gold*, *etc.*
are composed of". But *grain* means in addition something like "smallest unit
of weight" and "smallest possible quantity" as in *without a grain of vanity
(love*, etc.) What all these uses of *grain* have in common is not a semantic
feature, all the less an objective property, it is rather an operational
trait achieving the individualization of nouns (concepts) that are not in-
herently individuated. This is the general principle underlying the mani-
fold meanings of *grain*. This is what remains over when *grain*$_1$ (=*corn*, *cereal*)
undergoes a gradual process of formal abstraction (see below) and ultimate-
ly becomes empty of any specific object-predicative content; this is what
grain$_1$ shares with all the other individuatives (*corn/-s*, *grano/-s*, *hair a.*,
Gerät a., *pelo a.*, etc.) regardless of the semantic meaning. It is the same
difference as between Ger. *Kies* and *Kiesel* or between *Kork* and *Korken*.

The following examples show how one can refer to "the same thing" in
the same contexts in two different ways:

(30) *Die Beratung der Verbraucher durch die Zentrale Kostet nichts...
      Alle Beratungen sind Kostenlos.*
      '*Advice to consummers given by the center costs nothing...* <u>All
      consultations</u> *are free of charge*'

In Iturrioz 1986/ID-III I present many other examples taken from books and
newspapers, where "singular" (properly speaking, transnumeral) and plural
(as opposed to singular) of the same lexeme as used in alternation within
the same period in order to make reference to the same actual fact.

Notwithstanding the logical independence of the two types of linguis-
tic information pertaining to two different semiotic levels some generaliza-
tions may be made concerning the correlation between them

A. The grammatical opposition 'transnumeral' vs. 'singular-plural' are more
    firmly associated with object-predicative features such as "living" -
    "as food","food-grasses" , "their fruit", etc., in the case of lexical
    or derivational pairs then in the case of fusional boublets. Transnume-
    rality (thus the technique COLLECTION or MASS/MEASURE) is connected
    with the feature that ranks lower in the scale of animacy:

    CALF/-*VES*. 1. Young of bovine animal, esp.domestic cow, for first year[13]
      ↕
      VEAL.   Flesh of calf *as food*

    SHEEP   (pl. the same)1. Kinds of wild or domesticated timid gregarious
                   woolly occas. horned ruminant of which male is named *ram*, fe-
                   male *ewe*, and young *lamb*.
      ↕
      MUTTON   Flesh of sheep *as food*

B. Transnumerality can alternate with singular/plural in the case of the
    feature ranking higher in the hierarchy of animacy:

CEREAL. (usually plural). Kind(s) of grain *used for human food; article of diet* made from wheat, maize, or other cereals.

↕

CORN I. A grain, seed, esp. of cereals (also of pepper etc.)

II. (collect. sing.) grain, also cereal plants while growing.

v

GRAIN. I. A fruit or corn of a cereal

II. (Collect. sing.) wheat or the allied food-grasses or their fruit, corn, a particular species of corn.

GETREIDE. (unz.) *Kultur*pflanzen, die in Ahren oder Rispen angeordnete, mehlreiche und Trockene Körner tragen, Halmfrüchte, Körnerfrüchte

v

ZEREALIEN. Feldfrüchte, bes. Getreide

↕

KORN I. (Zählb.) Samen, bes. von Gräsern, Getreide, meist Roggen

II. (unz.) Getreide, bes. die als *Brotgetreide* verwendete Getreidesorte.

C.   The meaning conveyed by the collective noun or the collective reading is more specific. First of all it is less comprehensive: the extension of *corn II* is like that of cereal, while *corn I* comprises also *pepper* etc.. The collective singular tends to mean "a particular species" (the species used in a given country for human food: *Brotgetreide*"). Finally, the individuative noun or the individualizing doublet of a grammatical pair has more readings than the collective counterpart: *calf* means also the young of elephant, whale, deer, etc.", "stupid fellow", "floating piece of ice". "child", etc.; in the definition of *sheep* there are at least 4 different readings ("bashful embarrassed person", "member of minister's flock", "calfskin, leather"); *Getreide* has only a reading, *Korn II* has 3 ("Kornbranntwein", Beschaffenheit der Oberfläche des Papiers"), while *Korn I* conveys 8 readings, etc. etc.. From this we can deduce that MASS-MEASURE as a highly predicative technique is very selective with respect to the object-predicative meaning; the transnumeral tends to mean only what is used as

food or drink or for other human needs, as in the case of *calfskin, calfsleather* "skin prepared for use by tanning or similar process" (Ger. *Fell-/-Leder,* Span. *piel/cuero, piel/-es*). NUMBER as a more grammaticalized technique is much less selective, metaphorical or metanymic extension are more frequent and in general lexemes are more polysemic when they follow this technique: the readings need not be closely linked to one another.

D.   When the grammatical opposition is accomplished in a purely fusional way the correlation with object-predicative features is much more loose, as in the case of *fish* or *Gerät,* etc.. The derivational technique, as in *Kork-Korken, Kies-Kiesel* is in an intermediate position.

E.   The object-predicative features normally associated with the techniques or the underlying functional principles (individualization vs. generalization) do not emanate from the mental operations purparting the logical ordering of the world; they reflect rather the practical manipulation of the environment in order to satisfy the basic human needs. The correlation between metapredicative and object-predicative features can be stated in terms of the correspondence between the manifestations of the principle of indicativity (pragmaticity) at the grammatical and lexical semiotic levels.

In a few words, the objections raised to the traditional approach are:
(a) it is wrong to view the change from a subcategory to another automatically as derivation.
(b) formal concepts are confused with lexical meanings.
(c) semantic or cognitive traits are mistaken for ontological categories.
(d) the arguments are often circular or contradictory.
(e) the facts are distorted or oversimplified.

3.   *Circularity of the classical approaches.*

Pluralizability is one of the criteria on which the subcategorization of nouns is based, but it is not applied in a logically consistent way. According to Hempel nouns such as *Insekt* do not designate in plural individuals,

but rather species or sets of a lower level, and he considers mass nouns as an intermediate link, whose main characteristic is the irrelevance of individuality. The following definitions are remote in time, but they bear a near resemblance to each other with regard to the conception of grammar:

> There are a great many which do not call up the idea of some definite thing with a certain shape or precise limits. I call these "mass-words"... (Jespersen 1929:198).

> Wenn etwas durch eine SbG mit einem *Kontinuativum* als Kern bezeichnet wird (vgl. die SbG *Sand* in *Dort liegt Sand*), so wird das Gemeinte nicht als etwas betrachtet, das aus einzelnen Individuen besteht. Seine eventuelle interne Gliederung interessiert nicht (vgl. *Auf dem Teller liegt Obst*). (Heidolph et al. 1981:269).

The fact that certain nouns are not inherently individuated leads to the conclusion that they do not designate individuals. Since specific terms were defined as those designating individuals, it is easy to state that non-individuated nouns belong to a higher abstraction level, i.e. that they designate higher order entities. As the scale of generalization is conceived as a hierarchy of abstraction levels, once *Insekt* is defined as a generic concept comprising *Fliegen*, *Bienen*, etc., it can be concluded that *Insekt* does not designate a set of individuals but a set of species and consequently that it is (more) abstract. The reasoning begins with a wrong premise. Not *only* with terms like *Insekt*, but also with mass and abstract terms the plural frequently has an individualizing (not typifying) effect.

Contradictions and circularities are nowadays frequent in grammatical descriptions because of the fact that formal concepts are conceived as semantic traits and because linguists often resort to extralinguistic definitions and viewpoints in order to explain structural differences: noun is the category whose function is to designate objects, where an object is anything designated by a noun; continuatives (mass-words) are nouns designating a mass... Morphosyntactic differences between individuatives and ... abstracts are said to be determined by *very general semantic predicates* of the meaning of nouns: [± countable], [± abstract], [± personal], [± relational], etc.. According to the *Grundzüge* numerals may appear in a noun phrase

> wenn das Substantiv zählbare Gegenstände bezeichnet – deshalb ist z.B. *ein Eis* entweder falsch gebildet oder *Eis* hat die Bedeutung 'Portion (Speise-) Eis'. Ebenso erscheinen **zwei Marmor*, **mehrere Gold* usw. als falsch, es sei denn, das entsprechende

> Substantiv kann so interpretiert werden, als enthielte seine Bedeutung das semantische Prädikat "zählbar". (Heidolph et al. 1981:43)[14]

This way of presenting structural (formal) differences as differences between lexical meanings can be found in similar words in many grammars, from the classical grammars of Latin, Greek, etc., to the most modern grammars of Spanish, Arabic, German or Balaua, but also in many logical and philosophical works.[15]

Circularity concerns all the subcategories, but it is especially striking in the case of abstracts. Mass nouns are claimed to be used only in singular and without article "wenn sie *in ihrer eigentlichen Bedeutung* gebraucht werden". (Admoni 1970³:90).

> Die Konsequente Durchführung der Plurallosigkeit bei den Abstrakta, wenn sie *in ihrer eigentlichen Bedeutung* gebraucht werden, ist übrigens eine selbitverständliche Folge der *Unzählbarkeit der abstrakten Begriffe*... Es muss also betont werden, dass *ein wahres Abstraktum* als *ein unteilbarer Gesamtbegriff* erscheint, der irgendein Merkmal (eine Eigenschaft, einen Vorgang) dinghafter Wesen selbst als ein dinghaftes Wesen (eine Substanz) wiedergribt... Die *Abstrakta im eigentlichen Sinne* des Wortes kennen eben die Gegebüberstellung der individualisierenden und der generalisierenden Wahrnehmung und Darstellung des Dinges nicht, die das Wesen der Gattungsnamen ausmacht (Admoni 1970³:91)

Abstracts become individuatives designating singular phenomena, singular actions, etc.; "wenn sie Wahrnehmungen oder Gefühle ausdrücken, die als eine Folge von einzelnen Akten erscheinen, dann haben sie regelmässige Pluralformen: *Hoffnungen*, *Freuden*, *Bewegungen* usw. (Admoni 1970³:91). This calls up the idea that besides singular, concrete and countable hopes, joys and movements there is something else, namely the abstract hope, joy and movement. If we take notice of the fact that when these nouns are not (used as) individuatives, they often are used as continuatives (like *Brot*), we should conclude that there is something else, namely masses of hope, joy and movement:

(28) *Ein bisschen Bewegung fördert die Genesung*
      Un poco de movimiento favorece la recuperación

(29) *Er hat alle Hoffnung verloren*
      He has lost all hope

The use of abstracts in plural is very frequent, probably even more in Greek and Latin that in modern European languages. What traditional grammar says about this use is summarized in the following statement (the similarity to Admoni's account is as plain as a pikestaff):

> Die Pluralform gehört eigentlich nur den Gattungsnamen an, nicht den Eigennamen, Stoffnamen und Abstrakten; jedoch nehmen auch diese die Pluralform an, wenn sie einen Gattungs begriff bezeichnen. (Kühner/1955:15; Kühner/Stegmann 1962[4]: 71-2).

In these grammars full pages are dedicated to the different kinds of plural of proper nouns, mass nouns and abstracts; in many lexicographical works thousands of tokens are documented (Lebreton 1901 found more than 800 occurrences of plural abstract nouns in Cicero alone). Most linguists do not take into consideration that number may play a particular funtion when it is associated with these categories; on the contrary, it is assumed that we are concerned always with a change from one of these categories to the category of individuatives and with a corresponding change in meaning. For Greek:

> Die Abstrakta werden in der Pluralform gebraucht, wenn einzelne Arten, Fälle, Zustände, Ausserungen, Teile des abstrakten Begriffes oder die an verschiedenen Orten oder zu verschiedenen Zeiten wiederholte Erscheinung der abstrakten Thätigkeit bezeichnet wird, daher auch, wenn der abstrakte Begriff sich auf Mehrere erstreckt. (Kühner/1955:16)

With almost identical words for Latin in Kühner/Stegmann(1962[4]:77). For German:

> Einen Plural können sie [Abstrakta] nur dann bilden, wenn sie zum Konkretum, zu einer zählbaren umrissenen Einzelerscheinung, zu einer Spielart werden. (Grebe et al. 1966:166).

There is nothing new in the following remarks of the most recent grammar of German:

> [the singular is used] bei Substantiven, deren *Denotate* sich der Zählbarkeit oder einer quantitatinen Charakteristik entziehen, z.B. bei Stoffnamen..., Abstrakta..., bei bestimmten Kollektiva... Bezeichnungen für abstrakte Begriffe im Plural differenzieren den Grundbegriff oder sind auf *konkrete Erscheinungen* bezogen. (Heidolph et al. 1981:578).

Three fundamental mistakes are made in this approach:

a. the idea that each subcategory designates a specific type of "things"

b. the amusingly simple conception of number as a grammatical means for expressing singularity and plurality

c. the supposition that plurality fits only with a certain type of things that are conceived as singular concrete individuals of the same species and naturally designated by individuatives.

The shortcomings of this way of thought are even more evident when the main categories are aimed at, i.e. concepts such as 'noun', 'object', etc.:

> Substantive sind kategorial auf die *Benennung von Gegenständen* festgelegt. Trotzdem ist ihr semantischer Ausdruckswert nahezu universell. Durch Substantive werden nicht nur belebte und unbelebte Konkreta (Lat. concretus 'Körperlich') als sprachliche Gegenstände gefasst (*der Arbeiter, die Lehrerin, das Kind; der Bleistift, die Milch, das Stückchen*), durch die *Abstrakta* (Lat. abstractus 'weggezogen', 'verallgemeinert') kann auch Nichtgegenständliches sprachlich vergegenstänlicht werden (*der Geist, der Materialismus, die Freundschaft, die Philosophie, das Gemüt, das System*). Durch Substantivierung werden Einheiten anderer Wortklassen zu Substantiven geprägt, und mit der Fähigkeit ausgerüstet, die Funktionen dieser Wortklasse zu übernehmen und z.B. Geschehens-/Seinskategorien, Eigenschaften und Beziehungen als sprachliche Gegenstände zu erfassen... (Heidolph et al.1981: 568).

The authors of the *Grundzüge* speak of "generalized and abstract semantic contents" or of general categorial semantic traits; constituting the characteristic of a word class and correlating with its syntactic and morphological traits (see p. 488, 492, etc.). The idea goes back to the Russian germanist Admoni ("generalized and abstract meaning superimposed on the immediate and concrete semantics of the word, 1970[3]:62), who in his turn refers to the Russian linguists Fortunatow, Winagradow, Strojewa, Potebnja, etc., closely connected with the traditional grammars. Heidolph et al. waste no time in warning

> dass die Wortklassenchakteristik nicht in primärer Abhängigkeit von den semantischen Eigenschaften der Basismorpheme steht...., dass vielmehr erst durch die Stammbildung die Wortklassencharakteristik vorgeprägt wird. (Heidolph et al. 1981:488-9).

Moreover it turns out that a word contains in its meaning these semantic predicates by virtue of belonging to a class of words, and not the other way round. It is not the lexical meaning what determines that a word belongs to a class because it should be considered as an incongruity of the language that *joy,*

promulgation, etc., are nouns in spite of the fact that they do not designate "substances":

> *Semantische Kriterien* lassen nur bedingt Rückschlüsse auf die grammatische Funktion der Wörter im Satz zu, insofern als nur die Kategorialen semantischen Werte der Wortklassen unmittelbar dazu in Beziehung zu setzen sind. (Heidolph et al. 1981:488).

Grammar cannot be reduced to (lexical) semantics without falling into contradiction or circularity. The same goes for all simplistic conceptions of the relation between language and reality (including the materialistic one). According to Heidolph et al.

> Auf Grund ihrer typischen grammatischen Eigenschaften repräsentieren Wortklassen bestimmte allgemeine Begriffsklassen als Abbild von Klassen der objektiven Realität. (Heidolph et al. 1981:493).

In the same passage they admit that

> Diese Repräsentation erfolgt nicht unmittelbar, abhängig von der Bedeutung der Basismorpheme auf der individuellen Ebene des Wortes, sondern mittelbar, abhängig vom Bedeutungskomplex der typischen Morphemstrukturen der einzelnen Wortklassen, also auf der kategorialen Ebene eben dieser Wortklassen. (Heidolph et al. 1981:493).

That is the height of circularity.

FOOTNOTES

[1] See Mikkola 1966

[2] On the metalinguistic nature of these concepts, which represent second-order classificatory operations see Iturrioz 1986/LO

[3] See Iturrioz 1986/SL

[4] See Iturrioz 1982/AB, 1985/A-TA

[5] See Iturrioz 1986/RH

[6] On the constraints restricting the generic use of nouns see Iturrioz 1986/ID-I, esp. 217 H

[7] For more details on this subject see Iturrioz 1986/SL, 1986/ID

[8] The underlined expressions involve aspects that will be talked over below

[9] Composition is another intermediate instance; there are generalizing (collectivizing) as well as individualizing constructions: *Weizenkörner/grains of wheat*, *Grashalme/blades of grass*, *Wildtiere* 'game', *Kleidungsstücke* 'clothes', etc., as opposed to *Bankwesen* 'banking profession; all the banks as a whole', *Wurzelwerk* 'all the roots as a whole', *Samengut* 'seeds', *Papierkram* 'paper work', *Riemenzeug* 'leather equipment, herness, trappings', *Tierwelt* 'animal world', etc.

[10] Sausure 1919:159ff, Hjelmslev 1943:61ff; see also Robins 1964:101ff

[11] Benveniste 1964 (1954):12

[12] In the common parlance of Mexico *pez* is hardly ever used; *pescado* takes its place from the lexical as well as from the grammatical point of view: *pescado* functions as a mass noun and as an inherently individuated noun, like Ger. *Fisch*, Eng. *fish*; the living fishes are called *pescados*.

[13] The definitions are taken for English from *The Concise Oxford Dictionary*, for German from Wahrig's *Deutsches Wörterbuch*.

[14] See also p.82 and Kap. 2.3.1.1, §10

[15] See for ex. the articles collected in Synthese 31 and Pelletier ed. 1979.

REFERENCES

Admoni, W. 1970[3] Der deutsche Sprachbau. München: Beck.

Beneviste, E. 1964 "Tendances récentes en linguistique générale". Problèmes de linguistique générale, 1. Orig. publ. in Journal de Psychologie, P.U.F., Paris 1954.

Grebe, P. et al. 1966 Grammatik der deutschen Gegenwartssprache. (Duden-Grammatik). Mannheim:BI.

Greenberg, J.H. 1972 "Numeral classifiers and substantival number: Problems in the genesis of a linguistic type". WPLU 9:1-37. Also in Heilman, L. ed. 1974 Proc. of the 11th Int. Cong. of Ling. I. Bologna: Società Editrice Mulino, pp. 17-37.

Heidolph, K.E./W. Flämig/W. Motsch 1981 Grundzüge einer deutschen Grammatik. Berlin: Akademie Verlag.

Hempel, H. 1956/7 "Konkretum und Abstraktum als sprachliche Kategorien". Kant-Studium 48:134-160.

Hjelmslev, L. 1943 Omkring sprogteoriens grundlaegelse. København.

Hjelmslev, L. 1956 "Animé et inanimé, personnel et non-personnel". TCLP 1: 155-199. Also in Hjelmslev 1959:278-329.

Hjelmslev, L. 1959 Essais Linguistiques. TCPL 12. København: Nordisk Sprog og Kulturvorlag.

Iturrioz, J.L. 1982/AB "Apprehension im Baskischen". Seiler, H./F. Stachowiak eds. 1982 Apprehension. Das sprachliche Erfassen von Gegenständen. Teil II: Die Techniken und ihr Zusammenhang in Einzelsprachen. Tübingen: Gunter Narr, pp. 1-43.

Iturrioz, J.L. 1985/A-TA "La función de -a y de ta a la luz de la dimensión de aprehensión. Euskera 30:175-213.

Iturrioz, J.L. 1986/LO "Lógica y ontología. Tipos lógicos, grados de generalización y niveles lingüísticos". Iturrioz, J.L./F. Leal Algunas consecuencias filosóficas de UNITYP.Guadalajara, Jal., pp.123-142.

Iturrioz, J.L. 1986/SMF "Structure, meaning and function. A functional analysis of gender and other classificatory techniques". Función I/1:34-86.

Iturrioz, J.L. 1986/SL "Semiotic Levels. On the metalinguistic nature of grammatical meaning". Función I/1:119-144.

Iturrioz, J.L./RH "Review of C.P. Herbermann 1981 WORT, BASIS, LEXEM und die Grenzen zwischen Lexikon und Grammatik. W. Fink Verlag, München". Función I/2: 360-367.

Iturrioz, J.L. 1986/ID "Individuation and Determination. I: On the interaction of both dimensions in the use of the articles and other phenomena related to nominal subcategorization and reference". II: "Abstract entities are second-order entities". III: "The concept of verbal plurality and the pluralization of abstractives". Función I/2: 201-308.

Kühner, R./B. Gerth 1955 Ausführliche Grammatik der griechischen Sprache. Hannover, Leipzig: Hahnsche Buchhandlung. Leverkusen: Gottschalksche Verlagsbuchhandlung.

Kühner, R./K. Stegmann 1962[4] Ausführliche Grammatik der lateinischen Sprache. Leverkusen: Gottschalksche Verlagbuchhandlung. (Orig. publ. 1912).

Mikkola, E. 1966 Die Abstraktion. Begriff und Struktur. Helsinki.

Pelletier, F. ed. 1979 Mass terms: some philosophical problems. Dordrecht: Reidel.

Robins, R.H. 1964 General Linguistic. London: Longmans, Green & Co..