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Generic Plural Indefinites and (In)direct Binding*

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Theoreticians of genericity agree that the generic reading of indefinite expressions is dependent on the genericity of the sentence: the indefinite contributes a variable (see DRT-type analyses) that gets bound by an overt or covert adverb of quantification (Q-adverb, henceforth). According to Lewis (1975), Kamp (1981), Heim (1982), adverbs of quantification are *unselective*: they bind all free variables in their domain. The unselective binding hypothesis is confronted with various empirical and conceptual problems, which have led to the view that Q-adverbs are to be analyzed uniformly as *selective* quantifiers over events or situations[1] (Rooth (1985, 1995), Schubert & Pelletier (1987, 1988), de Swart (1991, 1996), Krifka & alii (1995), Krifka (1995), etc.). Those configurations in which Q-adverbs seem to bind (one or more) individual variables would constitute a side-effect of quantification over events: quantifying over events induces quantifying over the tuple of participants to the event. Given this analysis of Q-adverbs, a generically-interpreted indefinite (generic indefinite, henceforth) is *indirectly bound* by a Q-adverb that quantifies over events.

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[1]Although event-based and situation-based accounts are technically different, in many particular cases they coincide in empirical coverage. In this paper I will use an event-based notation.

In this paper, I will diverge from the above-mentioned authors in assuming that Q-adverbs may directly quantify not only over events, but also over individuals. The distinction between the two possibilities will prove to be crucial for the analysis of the generic readings of plural indefinites headed by *des* in French. I will show that those *des*-indefinites that are *directly* bound by a Q-adverb can only express generalizations over groups of individuals. *Indirectly* bound plural indefinites, on the other hand, allow for number neutralization, and may thus express generalizations over atomic individuals.

1 Generic indefinites: quantification over events and over individuals

According to the current view, stemming from Heim (1982), the generic reading of indefinites comes about when the variable supplied by an indefinite occurs in the restriction of a Q-adverb. For illustration, consider the example in (1). In line with the event-based approaches mentioned above, I will assume that this type of example relies on adverbial quantification over events. The variable supplied by the indefinite is not bound by the Q-adverb (the universal quantifier corresponds to *toujours* 'always'), but rather by an existential quantifier (de Swart (1996)[2]

(1) Quand Jean invite une amie, il lui prépare toujours à dîner.
'When John invites a friend, he always cooks dinner for her.'

(1') $\forall_e$ [[$\exists_x$ invite (e, John, x) ^ friend (x, John)] ->
[$\exists_x$ invite (e, John, x) ^ friend (x, John) cook-for (e, John, x)]]

The intuitive reading associated to this representation says that all events of John inviting some friend are events in which John cooks for that friend.[3]

Let us now consider an example such as (2):

(2) Un chien est en général intelligent.
'A dog is usually intelligent.'

Quite clearly, the intuitive interpretation is that the Q-adverb quantifies over

[2]De Swart (1996:176-178) uses dynamic existential quantifiers (Groenendijk and Stokhof (1991, 1992)) and dynamic generalized quantifiers (Chierchia (1995a)). Since this refinement is not needed here, I will use the output of de Swart's derivations, which contains static existential quantifiers.

[3] This is a somewhat simplified analysis: the two sets of events should be treated as overlapping, rather than as identical events (see de Swart (1991)).

dogs. The most straightforward representation corresponding to this reading is the one in (2'):

(2') usually (dog (x)) [x is intelligent]

LF's such as (2') rely on the hypothesis that Q-adverbs may quantify not only over events, as in (1), but also over individuals.[4] The difference between the two representations in (1') and (2') is due to a difference in the mapping rules between overt syntax and LF:[5]

(3) *If/when*-clauses go to the restriction of Q-adverbs (Lewis (1975), Heim (1982), etc.)
(4) Subjects of generic predicates (i.e., lexically i-level or habitual) that function as Topics go to the restriction of Q-adverbs.[6]

Which of these rules applies to a given example is entirely dependent on its overt syntax (including information structure). The domain of quantification of the Q-adverb is *read off* these representations: since open propositions denote sets of events, the LF in (1') corresponds to quantification over events; since nominal predicates denote sets of individuals, the LF in (2') corresponds to quantification over individuals. Given this difference, it is possible to distinguish between two types of generic (readings for) indefinites.

(5) a. An indefinite takes a truly generic reading iff it is directly bound by a Q-adverb.
b. An indefinite takes a pseudo-generic reading iff it is indirectly bound by a Q-adverb that quantifies over events.

2 Truly generic plural indefinites

It is a well-known fact that the generic reading of plural indefinites in French is subject to fairly strict constraints, which may slightly vary

[4]Event-based approaches assume instead that Q-adverbs can quantify *only* over events or situations (Rooth (1985, 1995), Schubert & Pelletier (1987, 1988), de Swart (1991, 1996), Krifka & alii (1995), Krifka (1995), etc.).

[5] Other mapping rules are needed for other types of sentences.

[6] This principle is inspired by, yet distinct from Diesing's (1992) Mapping Principle. Unlike Diesing, I do not think that the Mapping Principle is sensitive to a difference in syntactic positions (such as (Spec, IP) vs VP-internal subject position), but rather to (i) a lexical distinction between classes of predicates and (ii) information structure. Further refinement is needed, which can be ignored for our present purposes.

depending on the type of plural determiner. I will concentrate here on cardinal and *des*-indefinites,[7] leaving aside other plural determiners such as *plusieurs, certains*, 'several, some' etc. (for an insightful description of the basic data, see Corblin (1987), from whom I borrow most of the examples below).

2.1 Generic plural indefinites cannot express generalizations over atomic individuals

Corblin (1987: 57-58) observes that generic *cardinal* indefinites cannot express generalizations over atomic individuals : "Il n'existe pas d'interprétation générique distributive stricte des indéfinis nombrés." (There is no strictly distributive generic reading for cardinal indefinites). Corblin's (1987: 57-58) explanation relies on a pragmatic principle that basically says that examples of the type in (6)b *can* be assigned (representations corresponding to) generic readings, but such readings are blocked (or neutralized, in Corblin's terminology) because they can be expressed in a more direct way, by using the corresponding example built with a singular indefinite (see (6)a

(6) a. Une tortue vit longtemps.
'A turtle has a long life-span'

b. *Deux/trois ... tortues vivent longtemps.

'Two/three... turtles have a long life-span'

The same principle would account for similar restrictions shown by *des*-indefinites.[8] Examples such as (7)b would be blocked by (7)a, built with a singular indefinite:

(7) a. Un carré a quatre côtés.

'A square has four sides'

b. *Des carrés ont quatre côtés.
'**Des** squares have four sides'

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[7]Cardinal numerals and *des* can be grouped together insofar as they are "weak" determiners in the sense of Milsark (1977): in their unmarked use, they are not relational/proportional determiners, but rather intersective and symmetric.

[8]Corblin (1987) notes that strictly distributive readings (i.e., generalizations over atomic individuals) are marginally possible with *des*-indefinites. This issue will be examined in Section 3.4. below. For the moment, I concentrate on those examples that are incompatible with strictly distributive readings.

Further examples of the same type are given below:

Overt Q-adverb

(8) a. *Des enfants marchent rarement avant 10 mois.
'**des** children rarely walk before the age of 10 months.
b. *Des Indiens meurent en général jeunes.
'**des** Indians usually die young.'

Default GEN operator

(9) a. *Des chats sont intelligents.
'**des** cats are intelligent.'
b. *Des Roumains parlent français.
'**des** Rumanians speak French.'

2.2 Analysis

In what follows, I will argue that the unacceptability of examples such as (6)b and (7)b is not due to pragmatic principles, but rather to formal constraints on LF representations. I will essentially pursue Dobrovie-Sorin & Laca's (1998) proposal that the corresponding LF representations are ill-formed because of an incompatibility between the *plurality* of the indefinite and the selectional properties of the main predicates. Since the indefinites are plural, they supply group-variables, but this conflicts with the main predicates, which select atomic individuals. More precisely, the LF's in (7') and (9') are illegitimate (as indicated by ≠) because the variables in the restriction and in the nuclear scope range over different sorts of entities (groups and atomic individuals), and as such cannot be bound by the same operator:

(7') b. ≠ GEN X (X is a group of squares) [x has four sides]
(9') a. ≠ GEN X (X is a group of cats) [x is intelligent]
b. ≠ GEN X (X is a group of Rumanians) [x speaks French][9]

Restated within the relational analysis of quantifiers, the problem is that the two sets that need to be related by GEN are not of the same sort: the set corresponding to the restriction is a set of groups, whereas the set corresponding to the nuclear scope is a set of atomic individuals.

[9]This LF can be obtained via the mapping rule in (4) if we assume *speak English* is a habitual predicate obtained by applying a unary operator to the corresponding s-level predicate (Carlson (1977), Dobrovie-Sorin (2002)).

2.3 Generic plural indefinites express generalizations over groups of individuals

The analysis proposed here correctly predicts that generic plural indefinites can combine with i-level predicates that select *groups* (denote sets of groups of individuals[10]

(10) a. Deux/des droites convergentes ont un point en commun.
'Two/**des** convergent lines have a point in common.'
b. Deux/des pays limitrophes ont souvent des rapports difficiles.
'Two/**des** neighboring countries frequently have difficult relations'.
c. Deux/de vrais jumeaux se ressemblent dans les plus petits détails.
'Two/**de** true twins look alike down to the smallest details'.
d. Deux/des amis intimes se critiquent toujours.
'Two/**des** intimate friends always criticize each other'

These examples are acceptable, because the variables in the restriction and in the nuclear scope both range over groups (or pairs, depending on whether the indefinite is headed by *des* or by *deux):*

(10') a. GEN_X (X is a pair/group of convergent lines)
[X has a point in common][11]
b. $Most_X$ (X is a pair/group of neighboring countries)
[X have difficult relations]
c. GEN_X (X is a pair of true twins)
[X look alike in the smallest details]

These LF's rely on quantification over groups of individuals, which corresponds to the intuitive interpretation (generalization over groups of individuals).

[10]The versions of (10)a-c built with *deux* are borrowed from Corblin (1987). I have added the examples with *des*-indefinites. For reasons that I will not examine here, the generic readings of *des*-indefinites are less acceptable than those of cardinal indefinites. The grammaticality judgments indicated for *des*-indefinites should be read as follows: starred examples are not acceptable for any French speaker, whereas non-starred examples are acceptable for at least some speakers.

[11]Mathematically speaking, a group of convergent lines does not necessarily have one point in common. This problem can be solved by assuming that in the unmarked case, *des droites convergentes* denotes a set of groups of lines such that each line belonging to a group is convergent with all the other lines of the group.

2.4 Generic *des*-indefinites versus English bare plurals

The French data examined above shed serious doubt on the predominant analysis of English, according to which generic bare plurals are plural *indefinites* bound by the GEN operator. If English generic bare plurals were to be analyzed as plural indefinites of unspecified cardinality, they should behave on a par with French *des*-indefinites and the examples corresponding to (8) and (9) should be ungrammatical, contrary to fact:[12]

Overt Q-adverbs

(11) a. Children rarely walk before the age of 10 months.
b. Indians usually die young.

Default GEN operator

(12) a. Cats are intelligent.
b. Rumanian students speak French.

Given the ungrammaticality of the plural indefinite subjects in the French examples in (8)-(9), the English bare plurals in (11)-(12) cannot be analyzed as plural indefinites. We may instead assume that they function as names of kinds (as first proposed by Carlson (1977a,b)). This means that the French counterparts of (11)-(12) are not the examples in (8)-(9), but rather those in (13)-(14), with definite plural subjects (see Dobrovie-Sorin & Laca (1996, 1998)

(13) a. Les enfants marchent rarement avant10 mois.
b. Les Indiens meurent en général jeunes.

(14) a. Les chats sont intelligents.
b. Les étudiants roumains parlent français.

One may now wonder why these examples, unlike those built with plural indefinites (see (8)-(9)), *can* be interpreted distributively, as expressing generalizations that hold of atomic individuals. To answer this question, we may recall that plural definites are currently analyzed as supplying a

[12]Because she endorses the current analysis of the English examples in (11)-(12), de Swart (1993, 1996) suggests that the limitations shown by French *des*-indefinites are due to supplementary restrictions linked to the fact that *des*/*du* goes back to a partitivity marker, which would be incompatible with the quasi-universal, generic interpretation. Partitivity is often invoked in connection with the generic reading of *des*. But insofar as this notion is indeed relevant, it holds in exactly the same way for *indefinite* bare plurals (see Longobardi (2002) on the generic reading of Italian bare plurals). In other words, *des*-indefinites are partitive compared to definite plurals, but this is a general property of indefinites, not of *des* in particular.

constant term that denotes the maximal group of atomic individuals that have the property denoted by the corresponding singular noun. When occurring in the restriction of a Q-adverb, a constant denoting a group of individuals is shifted to denote the set of individuals belonging to that group:

(13') a. FEW x (x belongs to (the) children) [x walks before the age of 10 months].
b. GEN x (x belongs to (the) Indians)) [x dies young]

This type of LF representation cannot be assigned to plural *indefinites*, because such expressions supply a variable and a predicate that restricts the range of that variable; and since the nominal predicate is plural, the range of the variable must be a set of *plural* individuals (groups). As a consequence, generic plural indefinites can only express generalizations over groups.

3 Pseudo-generic plural indefinites

3.1 Plural indefinites that cannot be directly bound by a Q-adverb

Consider now the examples in (15):

(15) a. Deux/des hommes grands attirent toujours l'attention.
'two/**des** tall men always attract attention.'
b. Trois/des hommes forts peuvent soulever un piano.
'Three/**des** strong men can lift a piano.'
c. Deux/des pipelettes ne se supportent pas longtemps.
'Two/**des** chatterboxes won't stand each other for a long time.'
d. Deux/des enfants en bas âge donnent toujours beaucoup de travail'.
'Two/**des** small children are always a lot of work.'
e. Trois/des petites filles sont toujours en train de te préparer une surprise.
'Three/**des** small girls are always up to mischief.'

Examples of this type can be represented as relying on (direct) quantification over (groups of) individuals provided that the s-level predicate is analyzed as a habitual or dispositional predicate:

(15') a. $\forall_X$ (tall men (X) ^ /X/≥ two)) [$\mathbf{HAB}_i$ [X attract attention at t_i]

These representations contain two distinct operators: the universal quantifier (corresponding to *toujours* 'always') and a silent *unary operator*[13], HAB, which functions as a frequency adverb (it applies to an episodic eventuality and returns a habitual eventuality). The reading associated with this representation can be paraphrased as follows: all groups of two tall men are such that they have the habit of attracting attention. This interpretation does not correspond to the intuitive reading: the example in (15)a does not say that all groups have a certain habit, or characteristic behavior, but rather that all events/situations in which two tall men happen to be together, are such that attention is attracted. We are thus led to conclude that the examples in (15) do not rely on direct quantification over (groups of) individuals.

3.2 Plural indefinites that are indirectly bound by a Q-adverb that quantifies over events

The examples in (15) can instead be represented as relying on quantification over events, combined with the indirect binding (more precisely, the existential closure) of the variable supplied by the indefinite. (The representations corresponding to the *des*-versions lack the restrictions concerning the cardinality of the group)

(15")a. $\forall_e$ [[∃x be together (e, X,) ^ tall men (X) ^ /X/≥2] ->
[∃x be together (e, X,) ^ tall men (X) ^ /X/≥2 ^ attract att (e, X)]]

b. Gen_e [[∃x attempt to lift ..(e, X) ^ strong men (X) ^ /X/≥3] ->
[∃x attempt to lift .. (e, X) ^ strong men (X) ^ /X/≥3 ^ can lift a piano (e, X)]]

The interpretations that are read off the LF's in (15") can be paraphrased as: 'all events of two-tall-men-being-together are events of attracting attention', 'in general, an attempt of lifting a piano by three strong men is successful'. These readings correspond to the intuitive interpretations.

The representation in (15")a, as well as those corresponding to (15)c and (15)e (which are not given here, for lack of space), can be obtained by assuming that cardinal and *des*-indefinites supply a predicate of events paraphrasable as 'be together'. In some other cases, the restriction of the Q-

[13]For the idea that Q-adverbs can be either binary or unary, see de Swart (1991). Note, however, that according to de Swart, habitual predication does not rely on a unary frequency adverb, but rather on a binary operator that quantifies over events. My view is in line with Carlson (1977a,b) insofar as the operator that is responsible for the habitual use of s-level predicates is unary.

adverb is filled with the presupposition of the overall clause (Schubert&Pelletier (1987, 1988) *can lift a piano* presupposes *attempt to lift a piano* (see (15)b); *give a lot of work* presupposes *be taken care of* (see (15)d).

There is yet another type of example that systematically gives rise to quantification over events:

(16) a. Des lions blessés sont vulnérables.
'**des** lions injured are vulnerable'
b. Des enfants malades sont grincheux.
'**des** children ill are irritable'

As observed by Heyd (2002), these examples are built with *des*-indefinites modified by predicates that can function as sentential predicates. Such predicates can provide the restriction of a quantifier over events:[14]

(16') a. GEN e [[∃x injured (e,x) ^ x is lions] ->
[∃x injured (e,x) ^ x is lions ^ vulnerable (e,x)]
b. GEN e [[∃x ill (e,x) ^ x is children] ->
[∃x ill (e,x) ^ x is children ^ irritable (e,x)]]

3.3 Comparing adverbial quantification over events and over groups of individuals

We may now wonder why quantification over (groups of) individuals is blocked in examples of the type in (15), but allowed in examples of the type in (10), repeated under (17):

(17) a. Deux/des droites convergentes ont un point en commun.
'Two/**des** convergent lines have a point in common.'
b. Deux/des pays limitrophes ont souvent des rapports difficiles.
'Two/**des** neighboring countries frequently have difficult relations.'
c. Deux/de vrais jumeaux se ressemblent dans les plus petits détails.
'Two/**de** true twins look alike down to the smallest details.'
d. Deux/des amis intimes se critiquent toujours.

[14]The analysis sketched here and the one proposed by Heyd (2002) are alike insofar as nominal modifiers that can function as sentential predicates are analyzed as supplying the restrictive term of a generalization over events. The two proposals differ, however, regarding the existence of truly generic indefinites. Heyd (2002) follows the current view (see in particular Chierchia (1995a,b)) that Q-adverbs can only quantify over events, whereas I assume that Q-adverbs may also quantify over individuals, hence the existence of truly generic indefinites.

'Two/**des** intimate friends always criticize each other.'

Since most of the predicates in (17) are i-level, while those in (15) are s-level, one possible hypothesis could be that quantification over individuals is allowed only if the main predicate is i-level. But this hypothesis cannot be correct, since most s-level predicates can be shifted to a corresponding habitual or dispositional predicate, and such predicates allow direct quantification over individuals. And indeed, among the examples in (17), we find an example, the one in (17)d, which shows that habitual sentences are compatible with direct generic quantification over (groups of) individuals.

(17') d. GEN_X (two intimate friends (X)) [X $always_i$ criticize each other at t_i]

There are yet two other differences between (17) and (15). First, the predicates in (17) necessarily select groups, whereas those in (15) can be saturated by either groups or atomic individuals. Secondly, the examples in (17) contain *relational* nouns, which denote sets of (stable) *pairs of individuals*: convergent lines, neighboring countries, twins, etc. Compare nouns such as *cook, strong man* or *chatterbox*, which denote sets of (stable) *individuals*: several cooks, strong men or chatterboxes can be defined as groups only because at some point in time they participate together to the same *episodic* event, occur in the same situation, or simply occupy the same space-time localization: in (15)a, *three tall men* corresponds to "whenever three tall men are seen together", "in any situation in which three tall men are seen together"; in (15)b, *three strong men* means something like "three strong men that attempt to lift a piano"; in (15)c, *two chatterboxes* means two chatterboxes talking to each other. The impossibility of directly quantifying over groups of cooks, strong men, etc., can be analyzed as being due to the fact that such groups are not stable in time. Relational nouns, on the other hand, denote sets of stable pairs of individuals, which as such can be quantified over.

Summary

(i) In the unmarked case, plural indefinites are *indirectly* bound (they are "pseudo-generic" rather than "truly" generic): the default GEN operator (or an overt Q-adverb) quantifies over events or situations and indirectly over groups of individuals (the variable supplied by the indefinite is bound by existential closure). In other words, *two strong men* means "whenever two strong men are together" or "for any situation that contains two strong men".
(ii) Plural indefinites can be *directly* bound by a Q-adverb only if (i) the nominal predicate is a relational noun, which denotes a stable set of pairs of individuals (e.g., *twins* means "a pair of two people who are twins") and (ii) the main predicate selects a group-denoting subject.

3.4 Indirect binding and distributivity

Corblin (1987) observed that strictly distributive readings (i.e., generalizations over atomic individuals) are marginally possible with *des*-indefinites (although not with cardinals[15]

(18) a. Des élèves ne peuvent pas travailler dans ce genre de salle.[16]
'**Des**-students cannot work in this room.'
b. Des jeunes filles doivent se montrer discrètes.
'**Des** young women must show a discrete behavior.'

These examples are somewhat complex insofar as they contain modal verbs (see Section 3.5. below). Let us first concentrate on more neutral examples that illustrate the same observation:

(19) a. Méfie-toi, des guêpes énervées sont un danger terrible.
'Take care, excited wasps are a terrible danger.'

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[15]The difference between cardinals and *des*-indefinites is intuitively clear: because cardinals refer to a specific number, they cannot give rise to number neutralization.

[16]Corblin (1987: 73) also gives examples such as those in (i)-(iii
(i) Des tortues vivent longtemps.
'**des** turtles live a long time (turtles have a long life span)'
(ii) Des vaches ont un estomac énorme
'**des** cows have an enormous stomach'
(iii) Des arbres ont besoin d'eau pour vivre
'**des** trees need water in order to survive'
Most of my informants reject these examples; some informants marginally accept them only if *des* is interpreted as meaning 'some' or 'certain'.

b. Des éléphants blancs se promenant dans la rue ont toujours/parfois suscité une très vive curiosité.
'Always/sometimes if white elephants stroll in the street they arouse curiosity.'

(example (19)b is adapted from an Italian example due to Longobardi (2002))[17]

The sentence in (19)a may be interpreted as a warning against groups of excited wasps, but also against a single wasp. In (19)b, the curiosity may have been induced not only by groups of elephants strolling in the street, but also by a single elephant.

The existence of examples of this type immediately raises the following question: How can we distinguish between those generic sentences that allow and those that do not allow strictly distributive readings for *des*-indefinites? Corblin (1987: 75-76) suggests that in the unmarked case, *des*-indefinites are number-neutral, and as such are compatible with strictly distributive readings. Number neutralization would be blocked in a quite circumscribed environment: when the main verb denotes a property that "notoriously characterizes each member of a given class of individuals".[18] This characterization cannot help us understand the unacceptability of examples such as (8)-(9 they are built with predicates that cannot be viewed as defining properties of the individuals they are predicated of, and yet they block strictly distributive readings.

I have proposed above that truly generic *des*-indefinites, i.e., those *des*-indefinites that are directly quantified over, are not number-neutral: they can only express generalizations over groups. Below, I will argue that number-neutralization is allowed in those examples that rely on quantification over events.

Given the results obtained in Section 3.3. above, examples of the type in (19) cannot be analyzed as relying on selective quantification over groups of individuals (because the nominal predicate of the indefinite is not relational), but may be assumed to rely on adverbial quantification over events:

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[17]Longobardi's (2002) anlaysis of generic indefinites is quite different from mine (for discussion see Dobrovie-Sorin & Laca (2003)).

[18]Corblin (1987) does not define the notion of 'property that notoriously characterizes each member of a class', but judging by examples of the type in (7), one may propose that the relevant properties are those that should be listed among the defining properties of the individuals of which they are predicated: having four (equal) sides can be viewed as an essential property of squares. This suggestion is due to Francis Corblin (personal communication (2002)).

(19') b. ALL_e [[∃x stroll in the street (e,x) ^ white elephants (x)] ->
[∃x stroll in the street (e,x) ^ white eleph. (x) ^ arouse curiosity (e,x)]]

We may then make the hypothesis that the strictly distributive readings observed by Corblin are allowed for pseudo-generic indefinites, i.e., for those indefinites that are existentially closed inside the scope of a Q-adverb that quantifies over events:

(20) Pseudo-generic *des*-indefinites are number-neutral.

Under the proposal made here, number-neutralization should be kept distinct from strictly distributive readings, which correspond to direct quantification over atomic individuals. It is number-neutralization, rather than strict distributivity, that characterizes indirectly bound *des*-indefinites. Truly generic indefinites on the other hand, supply a variable that gets directly bound by the Q-adverb. And when the indefinite is plural, the variable will range over groups, which will induce generalizations over groups.

3.5. Generic Plural Indefinites in Modalized Contexts

Carlier (1989) has observed that modalized contexts, in particular deontic/prescriptive generalizations, facilitate the generic reading of plural indefinites :

(21) a. Des agents de police ne se comportent pas ainsi dans une situation d'alarme.
'Police agents do not behave like that in an alarm situation.'
b. Des jeunes filles doivent se montrer discrètes.
'Young ladies must behave discretely.'
c. Des hommes forts peuvent soulever une voiture.
'Strong men can lift a car.'

Carlier's explanation is, however, a mere tentative suggestion: 'L'insertion d'un verbe modal à interprétation déontique virtualise le prédicat et peut faire apparaître ainsi la possibilité d'une lecture générique du SN sujet indéfini'. (The insertion of a modal verb with a deontic interpretation virtualizes the predicate and may thus make possible the generic reading of the indefinite subject).

Within the account proposed here, two LF analyses are in principle possible, relying (i) on quantification over atomic individuals or (ii) on quantification over events/situations combined with the indirect

binding of the indefinite, as shown in (21') and (21"), respectively:[19]

(21') a. GENx (x is a police agent)
[not∃e (x behaves like this in e ^ an alarm situation (e))]
b. GENx (x is a young lady)
[ALL e (x shows a discrete behavior in e)]

(21") a. GENe,x (alarm situation (e,x) ^ police agents (x))
[not behave like this (e,x)]
b. ∀ e,x (sit. adequate for being discrete (e, x) ^ young ladies (x))
[show a discrete behavior (e,x)]

Since the main predicates are s-level, they have a time-variable. In the LF's in (21'), which correspond to selective quantification over individuals, the time-variables are bound by unary operators corresponding to the negation and to the modal verb *must*. In the LF's in (21"), the same overt markers translate as relational quantifiers over events.[20]

The LF's in (21')a-b are illegitimate: the direct binding of *des*-indefinites is incompatible with quantifying over atomic individuals. These LFs are independently ruled out by the constraint established above, according to which *des*-indefinites can be directly bound by a Q-adverb only if the head noun is relational. The only legitimate option is therefore (21"), in which the indefinite is *indirectly* bound by the Q-adverb that quantifies over events.[21]

Conclusions

Summarizing, I have proposed that the type of distributivity allowed by generic *des*-indefinites depends on whether they are directly or indirectly bound by a Q-adverb. Because directly bound *des*-indefinites supply variables ranging over groups, they can only express generalizations over groups of individuals. Indirectly bound *des*-indefinites are number-neutral.

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[19]The modal verb *must* that appears in (21)b is analyzed as a universal quantifier, which, depending on whether it is unary or relational/binary, translates as *always* or as *every* (see (21')b and (21)b).

[20] When an event-variable is present, the time-variable becomes superfluous, since events are individualized by the time of their occurrence.

[21] Corblin (1987) observes a constraint on the use of examples of the type in (21)a-b: they can be naturally used only if the speaker talks to a group of police agents or young ladies. Pragmatic constraints of this type are compatible with the formal constraints proposed here.

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