Mapping indefinites: towards a Neo-Aristotelian map[1]

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Abstract: The semantic map that Haspelmath (1997) offered for indefinite pronouns is highly valuable, but it is problematic and too simple about the relation between the meaning of the indefinite pronoun itself, its context, and the resulting meaning-in-context. As a representation of the meaning-in-context, it is claimed that one should go back to the Square of Oppositions, more particularly, to a three-layered 'Neo-Aristotelian' representation of this square.
Key words: semantic map, indefiniteness, negative polarity, free choice, Square of Oppositions

1. Haspelmath's indefiniteness map
Semantic maps have become an important tool in linguistic typology and one of the best known semantic maps is the one that Haspelmath (1997) proposed for indefinites. The map is represented in Figure 1.
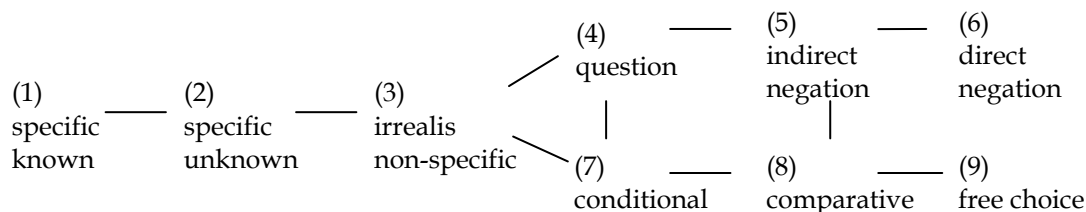

Figure 1: Haspelmath's indefiniteness map

Each of the nine map points represents different "functions" (or "uses") (Haspelmath 1997: 61). In (1) to (9) each of these functions is illustrated with English examples.

(1)   *Somebody* called you while you were away: guess who?
(2)   I heard *somebody*, but I couldn't tell you who.
(3)   Please ask *somebody* else.
(4a)   Has *somebody* told you about it?
(4b)   Has *anybody* told you about it?
(5)   John doesn't think that *anybody* will be there.
(6a)   I haven't seen *anybody*.
(6b)   I have seen *nobody*.

(7a)   If you see *somebody*, tell me immediately.
(7b)   If you see *anybody*, tell me immediately
(8)   He is better than *anybody* else in the group.
(9)   *Anybody* can solve this problem.

In a semantic map the functions are more or less close to another. Thus one can readily assume that direct negation is close to indirect negation, however they are defined, and that is why the map represents them next to one another and furthermore connects them with a line. This semantic contiguity (or perhaps better 'functional contiguity') is reflected by form: the indefiniteness markers that have more than one function normally[2] have functions that are contiguous. We can see this in Figure 2, which is Haspelmath's representation of the polyfunctionality of English *somebody, anybody* and *nobody* (Haspelmath 1997: 249).
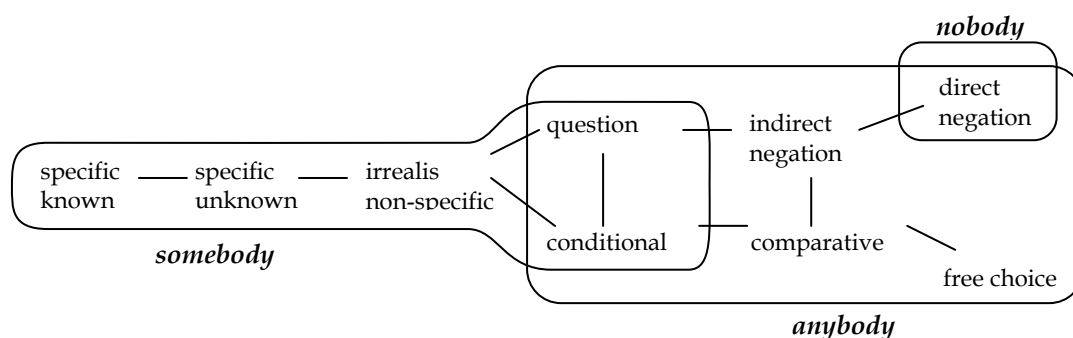

Figure 2: English *somebody, anybody* and *nobody*

In different languages the counterparts of the English indefinite pronouns may have different functions, but—this at least is the hypothesis—languages 'project' their indefinite pronouns on the same map and the functions of the markers are normally contiguous. Consider Figure 3, the Haspelmath (1997: 266) map for Greek personal indefinites.
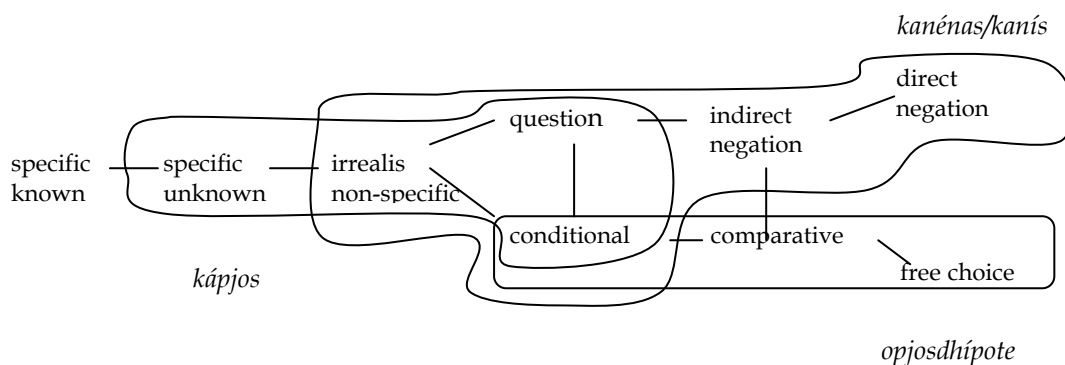

Figure 3: Greek *kápjos, kanénas/kanís, opjosdhípote*

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[2] For exceptions see van der Auwera, Kehayov and Vittrant (2009).

Haspelmath's *Indefinite pronouns* (1997) proved ground breaking in at least two ways. First, it constituted the first typological and theoretically well informed investigation of indefinite pronouns. As to the typology, it is based on a fairly detailed analysis of 40 languages, and it includes partial analyses of another 100 languages. For an area that had posed many difficult semantic puzzles, even for individual languages, the attempt to discuss these puzzles relative to a sizable typological sample had landmark value. It must also be noted that the decision to go typological did not dilute the semantic finesse. Haspelmath (1997) successfully integrated insights from earlier work, while also improving on many previous hypotheses and combining them in a coherent overall framework. Second, Haspelmath (1997) also proved ground breaking in a methodological way. It was the first monograph size study making crucial use of the semantic map methodology. In retrospect this proved highly influential. The methodology has become a cornerstone of typological work, and is undergoing continuous developments (cf. a 2008 theme issue of the journal *Theoretical Linguistics* and a 2010 theme issue of the e-journal *Linguistic Discovery*). For both of these reasons the book has become a classic within typology.

Surprisingly, for the more language-particular study of indefinites the impact of Haspelmath's book has been more modest. In the case of the detailed investigation of just one language, this is at least partially understandable, for the wide scope of typology will almost inevitably lose out on language-specific detail. But some of the recent language-particular work does involve more than one language, not the 140 languages of Haspelmath (1997), but two or three or even a few more. One could call this 'contrastive work'. One can make the point about the lack of impact of Haspelmath's typological work on current contrastive work with a remark on Vlachou (2007). Vlachou (2007) is a study of the free choice markers of English, French, and Greek. In this important work, there is only one reference to Haspelmath. Vlachou considers her work 'theoretical' and she makes clear that theory will profit from contrastive work (Vlachou 2007: 80) by quoting Haspelmath (1997: 7):

> Linguistic typology is indispensable for our goal of explaining particular grammatical phenomena and of detecting significant generalizations.

This quote comes from Haspelmath's introduction, a small section on the nature of typology. Of the more than 300 pages of the Haspelmath book which directly concern the cross-linguistic study of indefinites Vlachou (2007) has made no use.[3]

The semantic map methodology has not made any impact on contrastive studies either. This point can again be illustrated with Vlachou (2007: 169). She remarks that free choice elements in English, French, and Greek are semantically similar, though not identical, a situation suggesting Wittgensteinian 'family resemblances'. But the suggestion is left there and does not lead to the obvious step, for a typologist at least, of embracing semantic maps as the methodology *par excellence* to represent family resemblance.

The lack of impact of typology on language-specific work is due, at least in part, to what one could call an 'inter*sub*disciplinary' gap. Some of the language-specific work on indefinites is highly formal, whether syntactic or semantic, and Haspelmath's work

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[3] It is tempting to see whether Haspelmath (1997) made any impact on the other major book size contrastive and Greek-inclusive study of negative polarity, i.e. Giannakidou (1998). The impact is in fact minimal too, but here time probably proved an obstacle: Haspelmath (1997) (and its earlier PhD version) came too late to influence Giannakidou (1998) (and its earlier PhD version): this much is conversationally implicated by a footnote in Giannakidou (1998: 4).

is functional.[4] Functionalism is functionalism and formalism formalism and not always do the twain meet. It is also possible, though, that some of Haspelmath's (1997) work is flawed or at least lacking in important respects. We will show that this is the case.

2. Meanings, contexts and meanings-in-context

Current thinking on negative polarity and free choice items stresses the importance of distinguishing between the meaning of the item by itself, the effect of the context, and the resulting meaning-in-context (Giannakidou 1998, Vlachou 2007, Hoeksema 2010). Haspelmath (1997) is aware of this, and he chooses to focus on meanings in contexts, but only on those that are cross-linguistically relevant (Haspelmath 1997: 59-61). These meanings-in-context are in fact the functions that occur on the map. "Conditional", for instance, does not of course refer to indefiniteness as such, nor to a conditional context only, but to the indefinite meaning as we find it in a conditional context. This is both interesting and problematic.

The good thing about the intermediate position is that it allows Haspelmath (1997: 59) to steer clear of monosemy vs. polysemy discussions. Let us clarify this with *somebody* and *anybody*. The map in Figure 2 shows that they both lend their services to various functions. But what exactly is it then that they lend? And to what exactly? Is it one and the same meaning and are only the contexts different? Or can the meanings be different as well? Haspelmath (1997: 59) reserves the right to remain uncommitted. All that matters is that the distinction phrased in terms of different 'functions' has cross-linguistic relevance, i.e., that different languages express these 'functions' with different markers.

Note that the description of a function may involve more than one type of context. Consider his "free choice" function. If we take English and we restrict ourselves to *somebody, anybody* and *nobody*, the map in Figure 2 tells us that the free choice function is exclusively realized by *anybody*. (9), repeated below, already illustrates this function.

(9)   *Anybody* can solve this problem.

(9) exemplifies a context with an explicit possibility word, viz. the modal *can*. There are other contexts. (10) is a generic sentence, and (11) is a conditional apodosis (Haspelmath 1997: 51).[5]

(10)   *Anybody* will tell you that smoking is bad for you.
(11)   If you gave him a chance, he would insult *anybody*.

Just like there are three contexts, there are also three meanings-in-context. But there is still only one function, for the distinction between the three contexts is claimed not to be relevant cross-linguistically. If a language uses a marker for one context and thus one meaning-in-context, it will also use it for the other two.

Interestingly, when it comes to explaining why the map looks the way it does, Haspelmath sometimes drops the uncommittedness about the meanings of the markers themselves. To see this, we first need to be reminded of the fact that Figure 2 credits

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[4] Language-specific work of the functionalist strand does take recourse to Haspelmath (1997): see Fobbe (2004) on German and van der Auwera, De Cuypere & Neuckermans (2006) on Dutch.
[5] We had a so-called 'conditional' function before, viz. function (7) on the map, but this only concerns conditional protases. Here we are dealing with conditional apodoses.

anybody with functions other than the free choice function. There are in fact five other functions. We repeat the relevant examples and the labels of the 'functions'.

(4b)   Has *anybody* told you about it?   [question]
(5)   John doesn't think that *anybody* will be there.   [indirect negation]
(6a)   I haven't seen *anybody*.   [direct negation]
(7b)   If you see *anybody*, tell me immediately.   [condition]
(8)   He is better than *anybody* else in the group.   [comparison]

He groups together these functions under the label "negative polarity" and the free choice function is explicitly not included. What distinguishes the five negative polarity functions from the one free choice function would not in fact be the meaning of *anybody: anybody* is not polysemous or homonymous. Technically, in Haspelmath's view (1997: 117, 129) *any* always "expresses the low endpoint on a scale" (Haspelmath 1997: 117). What differs is that the five negative polarity functions involve scale-reversing contexts, and that the free choice function does not. The details and the jargon need not concern us here. The account is rather plausible and all that matters here is to remark that it is a little suspicious that the search for meanings of the markers themselves does become important when it comes to the explanation of the map.

   In the explanatory part of the work, classifying contexts is also important, and this is problematic. Despite the fact that Haspelmath (1997) considers there to be just one *any*, he does make a distinction between two types of contexts and meanings-in-context, viz. the negative polarity ones shown in (4) to (8) and the free choice ones shown in (9) to (11). This is in the tradition of Ladusaw (1980). However, there are many linguists that treat the free choice contexts as negative polarity contexts (e.g. Giannakidou 1998, Vlachou 2007). That still does not mean that one cannot subclassify the free choice contexts as a special subset of the negative polarity contexts. But where does one draw the line? The intuitive notion of free choice is clear enough in the context of the possibility modal, as is shown by the paraphrase in (12).

(9)   *Anybody* can do this.
(12)   *Anybody that you might want to choose* can do this.

But the same paraphrase is available for the negative polarity function called "comparison", which is not classified as free choice.

(8)   He is better than *anybody* else in the group.
(13)   He is better than *anybody* else in the group *that you might want to choose*.

The matter is more confusing still when one considers the paraphrase options in terms of existential versus universal quantification. On the one hand, the undisputed free choice example of (9) allows a reasonable good paraphrase with *everybody,* but not with *somebody*.

(9)   *Anybody* can do this.
(14)   ≈ *Everybody* can do this.
(15)   ≠ *Somebody* can do this.

On the other hand, the undisputed negative polarity example of direct negation allows an existential paraphrase and not a universal one.

(6a)   I haven't seen *anybody*.
(16)   ≈ It is not true that I have seen *somebody*.
(17)   ≠ It is not true that I have seen *everybody*.

If this were a criterion, which Haspelmath's discussion of sentence (22)—see further down—would seem to imply, then we have an additional reason for classifying the comparison function under free choice. At least some comparative *anybody* uses indeed amount to (very nearly) the same meaning-in-context as comparative *everybody*.[6]

(8)   He is better than *anybody* else in the group.
(18)   ≈ He is better than *everybody* else in the group.

Yet what does one then do with the free choice categorization of the hypothetical apodosis, illustrated in (11)? Here *somebody* seems to make for a good paraphrase, and *everybody* definitely doesn't.

(11)   If you gave him a chance, he would insult *anybody*.
(19)   ≈ If you gave him a chance, he would insult *somebody*.
(20)   ≠ If you gave him a chance, he would insult *everybody*.

With respect to these issues Haspelmath (1997) inherits the problems that have beset earlier researchers, and there is no evidence that Haspelmath's (1997) approach offers a better account.

    Let us now come to a problem that is specific to Haspelmath's theory. Independently of whether one would classify a certain meaning-in-context as one of negative polarity or of free choice, one would want each of the map points to identify just one of the relevant meanings-in-context and not two. But this is not the case.

    In his discussion of the conditional function, Haspelmath (1997: 117) takes the availability of an existential reading as indicative of negative polarity and the availability of a universal reading as indicative of free choice. Consider the conditional example of (7b) again.

(7b)   If you see *anybody*, tell me immediately.

(7b) does not accept the paraphrase with *everybody*. The paraphrase with *somebody* is fairly good, i.e., as good as the paraphrase relations appealed to before.

(21)   ≠ If you see *everybody*, tell me immediately.
(7a)   ≈ If you see *somebody*, tell me immediately.

However, there are conditionals that do accept a paraphrase with *everybody*, and these are probably always ambiguous. Consider (22) and its two readings, (23a) with *everybody* and (23b) with *somebody*.

(22)   If you can see *anybody*, tell me immediately.

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[6] There are different types of comparatives, and Haspelmath (1997: 79-80) is aware of this (and he appropriately refers to Hoeksema 1983).

(23a)   ≈ If you can see *everybody*ˌ tell me immediately.
(23b)   ≈ If you can see *somebody*ˌ tell me immediately.

Haspelmath (1997: 117) discusses the ambiguous conditional type of (22), too, but blames the existence of the two readings on the closeness of negative polarity ("scalar endpoint on a reversed scale") and free choice ("scalar endpoint on a non-reversed scale"), but that does not itself explain why the ambiguity does not show up in all conditionals. Presumably the availability of the free choice *everybody* reading is related to the presence of the possibility modal *can*. 'Computing' the meaning-in-context in a context that has both a negative polarity trigger and a free choice trigger is probably not an easy matter. In any case, conditionality as such cannot be said to be uniquely associated with a resultant negative polarity function, and neither can possibility as such be associated with free choice, yet it is these options that the semantic map represents.

A second illustration of the same basic problem concerns direct and indirect negation, which are claimed to be negative polarity functions. However, just like for the condition function just discussed, one can find contexts allowing paraphrases with *everybody* and these would thus seem to involve the free choice function instead. Consider (24) and (25), uses brought to the foreground by Horn (2000).

(24a)   I do*n't* go to bed with just *anybody*. I have to be attracted to them sexually.
(24b)   ≈ I do*n't* go to bed with just *everybody*. I have to be attracted to them sexually.

(25a)   I do*n't* think that I go to bed with just *anybody*. I have to be attracted to them sexually.
(25b)   ≈ I do*n't* think that I go to bed with just *everybody*. I have to be attracted to them sexually.

The lesson is similar to the one about condition illustrated with (22) and its two readings (23a) and (23b): negation does not seem to be as strictly associated with negative polarity as the map would suggest.

Third, *any* is claimed to be unacceptable with the so-called "irrealis non-specific" function. The latter is supposed to be realized in various contexts, one of them being imperatives (Haspelmath 1997: 40-43). However, when discussing the free choice function, Haspelmath (1997: 49-50) readily admits that the compatibility of the free choice function and the imperative context, as in (26).

(26)   A: Bring me a chair.
       B.   Which one?
       A: Bring me *any* chair.

The reason why Haspelmath (1997: 59) thinks that free choice is allowed in the second imperative in (26) is that "although the sentence is structurally an imperative sentence, its communicative force is not that of a command" and that it "is functionally equivalent to 'You can bring me any chair'". We fail to be convinced by this argument. The imperative as such, it seems to us, is always vague between at least a command and a permission reading and thus allows both *must* and *can* paraphrases. Thus once more, free choice would seem to stretch further than just the right-hand bottom corner of the map.

To conclude, the study of indefiniteness poses complicated problems about the relation between the meanings of the indefinite markers themselves, the types of

contexts that they combine with, and the resulting meanings-in-context. These problems are not sufficiently accounted for in Haspelmath's approach. The most important problem is perhaps that Haspelmath's functions relate to one element of context, such as conditionality, negation or imperative, and that combining an indefinite marker with these does not always lead to a unique meaning-in-context. One could claim that Haspelmath's map is too simple. Yet from another point of view, it could also be said to be too complex, when we see that free choice does not merely occur in the one map point at the bottom right but spreads to the left.

3. A Neo-Aristotelian map

In the previous section we commented on individual map points. In this section we discuss the overall geometry of the map. In van der Auwera & Van Alsenoy (forthcoming) we started this and we made the following claims:

i.   even though Haspelmath's indefiniteness map is often taken to be a model of a typological semantic map, it is in fact highly unusual in that it maps both positive and negative concepts. This is normally not the case. Haspelmath's (2003: 219) dative map, for instance, contains only positive concepts, such as recipient, beneficiary and possessor, and there is no space for the interaction with negation.

ii.   there is a resemblance between the Haspelmath map and some modern versions of the Aristotelian "Square of Oppositions" as applied to quantifiers. More particularly, these modern versions do not start from four basic notions, like the classical square, but from only three, i.e., *all, some* and *no* (see e.g. Horn 1990). Both *some* and *no* are also mapped on the Haspelmath map; *all* is not—at least not on the basic map—but it is at least close to free choice *any*. Figure 4 shows a 'projection' from a Neo-Aristotelian 'Triangle of Oppositions' to a version of the Haspelmath map for English, one which embodies a claim as to where positive *any* equals positive *all*.
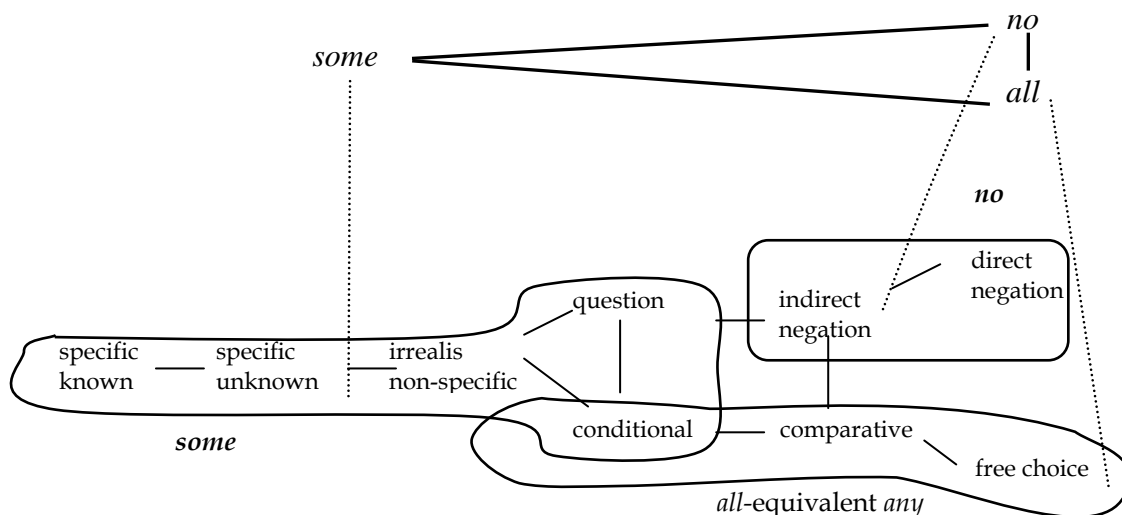

Figure 4: A Neo-Aristotelian Triangle of Oppositions
and Haspelmath's indefiniteness map

Of course, a similarity is not the same as an identity. Basically, the simple triangle is much less complex than the Haspelmath map, in part because there is no space for negative polarity and the two geometries are designed to show different things. The Neo-Aristotelian quantifier triangle concerns quantification, i.e., the difference between the universal quantification involving all members of a set, the zero quantification of no members of a set, and the existential quantification of some members. One could say that the indefiniteness map basically concerns choice: no choice versus specific choice and non-specific choice. But the two dimensions are related. A universal and a zero quantification both concern a situation of no choice, and the existential quantification involves a choice, which could be either specific or non-specific. A combination of quantification and choice could give us the following map.

Zero quantification - No choice

Existential quantification   Existential quantification
Specific choice   Non-specific choice
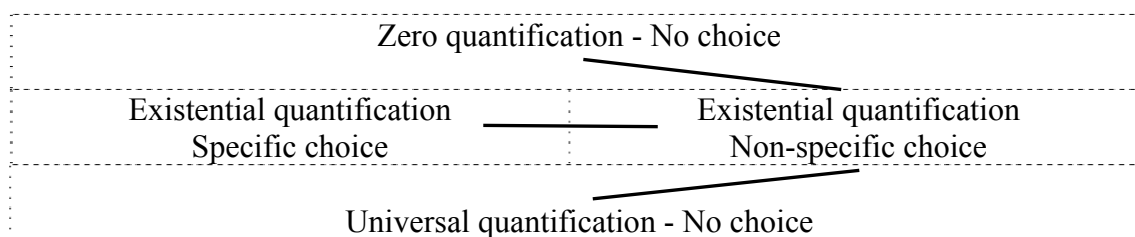
Universal quantification - No choice

Figure 5: A Neo-Aristotelian three-layered square for quantification and choice

Like the Neo-Aristotelian square for modals and quantifiers argued for in van der Auwera (1996, 1998) and van der Auwera & Bultinck (2001), the square has three layers, going from zero to existential to universal quantification, but it adds the dimension of choice. Like in the Haspelmath map, the three extremes, i.e., existential specific, zero and universal are not directly connected. Like both the earlier Neo-Aristotelian maps and the Haspelmath map the map in Figure 5 is supposed to show meanings-in-context. But the map itself does not tell us anything yet about the context. It does not tell us, for instance, what the effect of a conditional context is. But remember from the previous section that there is no direct link between a conditional context and a function and the direct mapping of the Haspelmath map is too simple. It follows that the Neo-Aristotelian map does not give any information about the cross-linguistic relevance of this or the other context. Both the comparative *any* of (8) and the possibility modal *any* of (9) resort under 'Universal quantification - No choice', but the fact that languages often differ from English by having different indefinite markers is not shown on the Neo-Aristotelian map.

Another difference is that non-specific choice does not have as wide an extension on the Neo-Aristotelian map as it has on the Haspelmath map. Thus it does not extend into the realm of negation. At the level of meaning-in-context, when a set has no members, there is in fact no choice. When the speaker has not seen anybody or when he has seen nobody (as in (6)), one does not have to choose among these 'anybodies' or 'nobodies'.

(6a)   I haven't seen *anybody*.
(6b)   I have seen *nobody*.

But it is also true that at the level of the meaning part of the meaning-in-context, the positive element *anybody,* has non-specific reference, and it is therefore no accident that it is the non-specific *anybody* that shows up rather than specific *somebody*. The map shows this affinity with the contiguity between non-specific choice and no choice.

The third big difference is between the Neo-Aristotelian and the Haspelmath map is that the Neo-Aristotelian map does not show 'free choice'. At the level of meaning-in-context for (9), when each member of a set has a capacity, one does not choose, i.e., one does not separate those members that have a capacity from those that don't have it: they all have it.

(9)   *Anybody* can solve this problem.

Of course, it is true that at the level of the meaning part of the meaning-in-context, one could say that one can freely choose and one can also choose in a non-specific way. Again, it is no accident that specific *somebody* is not allowed and one finds non-specific *anybody*.

Let us now deal with some of the map points in more detail. Which of the illustrated Haspelmathian functions go where? Under 'zero quantification - no choice' we obviously categorize the simple negative assertions (5) and (6).

(27)   Zero quantification - No choice
      (5)   John doesn't think that *anybody* will be there.
      (6a)   I haven't seen *anybody.*
      (6b)   I have seen *nobody*.

Note that both direct and indirect negation go there. We are convinced that Haspelmath (1997) is right in considering this distinction cross-linguistically relevant. It even shows in English. It has been remarked (by Szabolsci 2004: 415 if not earlier) that *some* can be felicitous for negation too, at least for the kind of 'raised' negation illustrated in (5).

(28)   John doesn't think that *somebody* will be there.

As the map point stands for a meaning-in-context, it stands to reason therefore to specify both the meaning and the context. So for English, one would have to note that with at least one kind of indirect negation both *some* and *any* are possible.

Note that the case of direct negation is interesting too. On the Haspelmath map for English we find both *nobody* and *not … anybody*. This is correct, but the two strategies differ with respect to context. For *not … anybody* the context is indeed one with direct negation, as expressed by *not*, but for *nobody* the context actually has to be positive. So the meaning-in-context 'zero quantification - no choice' is realized by three of the English *-body* pronouns, viz. *somebody, anybody* and *nobody*, and in at least three types of contexts, viz. that of an indirectly negated assertion ("iNEG"), a directly negated assertion, and a positive assertion: Figure 6 represents this. Figure 6 repeats the thee-layered square shown in Figure 5 and deemed appropriate for the level of meaning-in-context, and it adds a layer specifying the composition of the 'zero quantification - no choice' meaning-in-context.

Zero quantification - No choice

iNEG *somebody*		
NEG *anybody*	POS *nobody*	
iNEG *anybody*		

Existential quantification

Specific choice

Existential quantification

Non-specific choice
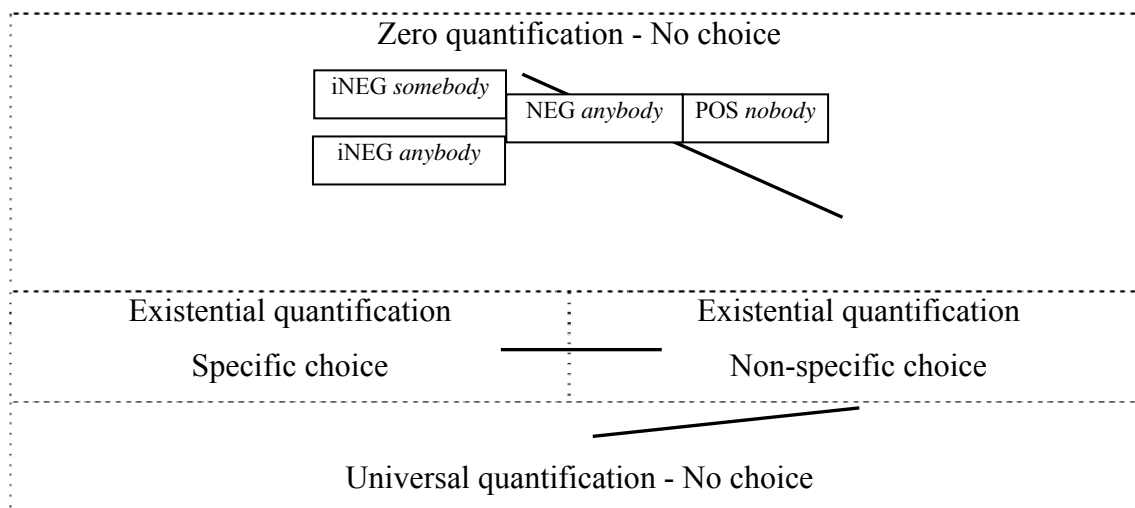
Universal quantification - No choice

Figure 6: An extended Neo-Aristotelian three-layered square

Note that the account of the meanings and the contexts that yield 'zero quantification - no choice' is by no means complete. For one thing, the account of the context will have to say that interrogative contexts are different. Thus in questions *nobody* and *not … anybody* do not score the same meaning-in-context.

(29a)   Didn't you see *anybody*?
(29b)   Did you see *nobody?*

Also, there is no claim, even when restricted to assertions, that any combination of the meanings of *somebody*, *anybody* or *anybody* and the direct or indirect negative contexts uniquely determines the 'no quantification - no choice meaning-in-context. In (24a), for instance, *anybody* occurs in a direct negation context but the resulting meaning is not one of 'zero quantification - no choice'. We will come back to the intended meaning-in-context later.

(24a)   I don't go to bed with just *anybody*. I have to be attracted to them sexually.

Under 'Universal quantification - No choice' would resort any positive uses in which *any* is replaceable by *every*.

(30)   Universal quantification - No choice
    (8)   He is better than *anybody* else in the group.
    (9)   *Anybody* can solve this problem.
    (22)   If you can see *anybody*, tell me immediately.

The claim is not that the pronouns *any* and *every* are synonymous. That would be a claim at the level of the individual item. The claim is only that in some contexts *anybody* and *everybody* do yield the same contextual meaning (the meaning-in-context). Such information can again be entered on the map (with e.g. "COMP" for comparative and "POSS" for possibility).
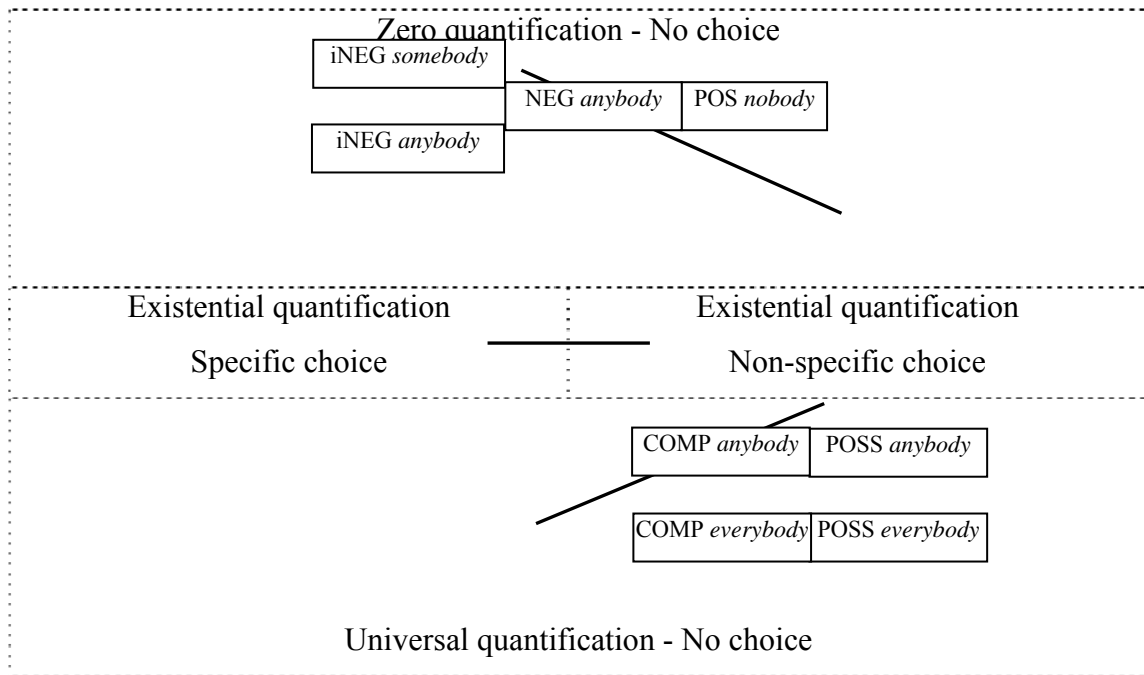
Figure 7: A 2nd extended Neo-Aristotelian three-layered square

On 'Existential quantification' we will remain brief. The specific choice subtype is Haspelmath's function (1), and any remaining function goes under non-specific.

(31)   Existential quantification - Specific choice
        (1)   *Somebody* called you while you were away: guess who?

(32)   Existential quantification - Non-specific choice
        (2)   I heard *somebody*, but I couldn't tell you who.
        (3)   Please ask *somebody* else.
        (4a)   Has *somebody* told you about it yet?
        (4b)   Has *anybody* told you about it yet?
        (7a)   If you see *somebody*, tell me immediately.
        (7b)   If you see *anybody*, tell me immediately.
        (11)   If you give him half a change, he would insult *anybody*.
        (26)   A: Bring me a chair.
               B: Which chair?
               A: Bring me *any* chair.

Specifications of the compositionality of these functions can be entered on the map much like illustrated in Figure 6 and 7.
    There is one use, not discussed by Haspelmath (1997), that we have not assigned any place yet, viz. the one in which *not anybody* is replaceable by *not everybody*.

(24a)   I do*n't* go to bed with just *anybody*. I have to be attracted to them sexually.

(25a)   I do*n't* think that I go to bed with just *anybody*. I have to be attracted to them sexually.

The meaning-in-context is actually the troublesome fourth corner of the Aristotelian square that triangularists wanted to get rid of. In the case of quantifiers, for instance, one claim is that whereas languages have the one-word quantifiers *all, some* and *no*, they don't have anything like *nall* (Horn 1990). This claim seems true, but nevertheless the collocation *not all* is perfectly well formed and meaningful and not quite the same in meaning as *some*. Furthermore, in the sphere of modals specific constructions do specialize for this meaning. English, for instance, has *must* for *all, may* and *can* for *some, mustn't* and *can't* for *no*, but it has developed *needn't* for *nall* (van der Auwera 1998, van der Auwera & Bultinck 2001). In fact, *not just any*, we claim, is of this type, and so is *not any old*.

That the troublesome fourth Aristotelian concept does make sense has not meant that Neo-Aristotelians have gone back to the Aristotelian square. What they have done (Horn 1990, van der Auwera 1996) is to frame this notion in terms of a disjunction of the two non-universal concepts: *not all* means 'either no or some' and *needn't* means 'either mustn't/can't' or may/can'. This is what we need here too. (24a), for instance, means that the speaker only goes to bed with specific individuals, allowing, however, that nobody meets the speaker's criteria and that (s)he does not therefore go to bed with anyone. Figure 8 places this intermediate meaning-in-context, exactly like in the quantification only maps in van der Auwera (1996, 1998) and van der Auwera & Bultinck (2001).[7]

Existential or zero quantification Specific or no choice	Zero quantification - No choice	
	Existential quantification Specific choice	Existential quantification Non-specific choice
Universal quantification - No choice		

The fact that the *not just any* meaning-in-context finds a natural place on the Neo-Aristotelian map and not on the Haspelmath map is rather strong evidence in favor of the former.

4. Conclusion

This paper points to some strengths and weaknesses of the semantic map that Haspelmath (1997) offered for indefiniteness. The main weakness of the Haspelmath resides in the fact that it oversimplifies the relations between meanings, contexts and resulting meanings-in-context. As a representation of meanings-in-context, the paper argued that it is worthwhile linking up the Haspelmath map with proposals starting from the Aristotelian Square of Oppositions. Since these proposals take the Aristotelian thinking in new directions, they are called 'Neo-Aristotelian'. The paper then explored one Neo-Aristotelian proposal, viz. one with a square with three layers.

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[7] The counterpart to 'some if not no' is 'some if not all', but we don't put it on the new map, for there might not be a single language that lexicalizes or at least expresses 'some if not all' in any special way.

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