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ON SINGULAR EXISTENTIAL QUANTIFIERS
IN ITALIAN

Abstract. The paper discusses the paradigm of singular quantifiers in Italian (*qualche*, *ogni*, *qualsiasi*, etc.), focusing on the syntactic and semantic properties of the existential *qualche*. In different domains, *qualche* seems to correspond to the English *a few*, *one or more*, *some or other*. The analysis tries to derive the polisemy of this expression from two distinct positions of interpretation, a basic logical meaning and the effect of pragmatic scales. *Qualche* is then contrasted with English *some*, Spanish *algun* and Italian *qualsiasi*. In the second part of the article the theory is tested against the scope possibilities of *qualche*, and the quantificational status of this indefinite is evaluated.

AQ: Please check if the insert of 'asterisk' symbol is correct?

1. INTRODUCTION*

This paper is about the Italian word *qualche*, an existential determiner with various unusual properties: in different contexts, *qualche* can be singular or plural in meaning; its scope tends to be narrow, and it can coexist with an indefinite article (*un qualche*). In the first section I will present in some detail the meaning and distribution of this determiner in the context of other Italian singular determiners, since these interesting data are relatively little–known in the generative semantic literature. I will then argue that the properties of *qualche* follow from the proposal that *qualche* is positionally ambiguous: in one position, it roughly behaves like English singular *some*, or Spanish *algun*; in the other, it is a plain existential determiner which acquires its plural meaning by scalar inferences. I will then compare *qualche* with the English determiner *some*, factoring those aspects in which the two forms diverge, and finally address the question whether *qualche* should be considered a biargumental existential quantifier, or rather an indefinite.

The paper will assume an extended DP structure and a direct mapping between functional layers and meaning types, as in Zamparelli (2000) and Heycock and Zamparelli (2005). However, the focus of the explanation will be on the effects of pragmatic comparison among determiners in the same syntactic positions.

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In the Italian-English dictionaries I have consulted, *qualche* is translated as *some* or *a few* followed by a plural nominal. In this paper I will transliterate *qualche* as SOME, and *un qualche* as A SOME (often glossed "some" plus singular N, for reasons given below). *Un qualche* is formed by the indefinite article *un* plus *qualche*, a combination also found in other complex Italian determiners, i.e. *un qualsiasi*+N, lit. "a whichever-it-may-be N" and *un qualunque*+N, lit. "a whichever N". Etymologically, *qualche* is composed by the words *quale* "which" (containing the Italian Wh- morpheme *qu-*), plus the complementizer *che* "that" (cf. the fixed form *quale che sia* "whichever it may be").

2. THE ITALIAN SYSTEM OF SINGULAR DETERMINERS/PRONOUNS

Italian has various determiners which are syntactically singular, and have a null-nominal counterpart containing the morpheme $un_{masc}/uno_{masc}/una_{fem}$ "one" but no visible nominal or pronominal restrictor.[1]

(1)

Meaning	Determiner form	Null-nominal form
Existential	*Qualche* N "Some N" (?)	*Qualc-uno* "Some/some-one"
Existential	*Un(o)* N "A(n)" (article) or 1 (numeral)	*Uno* "One/someone"
Existential	*Un qualche* N "A some N" "Some_*sing*"	Ø
Universal	*Ogni* N "Every N"	*Ogn-uno* "Every-one"
Free choice	*Qualsiasi* N "Any$_{fc}$ N"	Ø
Distributive	*Ciasc-un(o)* N "Each N"	*Ciasc-uno* "Each/each-one"
Negative and negpol	*Ness-un(o)* N "No N"	*Ness-uno* "None/no-one"
Negpol	*Alc-un(o)* N "Any$_{negpol}$ N"	Ø

All the determiners in Table (1) select a syntactically singular count noun,[2] and trigger singular verb agreement. However, the *-uno* morpheme is obligatory in the null-nominal form, but *ciascuno*, *nessuno*, *alcuno* keep it also in the determiner form.

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[1] For simplicity, the masculine form in *-o* will be used in the rest of this paper.

[2] The exception is a class of abstract mass nouns discussed in Tovena (2001), which can appear with *uno/nessuno/un qualche/un certo*, though not with *qualche*. I set them aside here.

The null-nominal forms in Table (1) can have an implicit partitive interpretation, coindexed with a previous discourse element with which they agree in gender (see (2) and its glosses), or they can be free, as in (3). In the latter case, they are always [+HUMAN,+MASC].

(2)   Ieri   delle cicogne$_i$ si sono fermate sopra al   tetto. . . .
      yesterday   some storks-FEM$_i$ stopped   on   the   roof. . . .
      "Yesterday some storks stopped on my roof. . . ."

     a. {Una$_{j \subset i}$ / Qualcuna$_{j \subset i}$ / Nessuna$_{j \subset i}$ / Ognuna$_{j=i}$ / Ciascuna$_{j=i}$}
        {one$_{j \subset i}$ / some$_{j \subset i}$ / none$_{j \subset i}$ / every one$_{j=i}$ / each$_{j=i}$}
        è   stata fotografata   e   ripresa.   *SUBJ*
        has been photographed and filmed.
        "{One / Some / None / Each / Every one} of them$_i$ has been photographed and filmed."

     b. {Una$_{j \subset i}$ / Qualcuna$_{j \subset i}$}, sono riuscito a fotografarla$_j$.
                                               DOBJ, left topicalized
        {one$_{j \subset i}$ / some$_{j \subset i}$}   I managed   to photograph-it$_j$
        "I managed to photograph {one / some} of them$_i$."

     c. A {una$_{j \subset i}$ / qualcuna$_{j \subset i}$ / ognuna$_{j \subset i}$}, sono riuscito a dare t_j un biscotto.
                                                 IOBJ, left topicalized
        to {one$_{j \subset i}$ / some$_{j \subset i}$ / every one$_{j \subset i}$} I managed   to give t_j a cookie
        "I managed to give a cookie to {one / some / every one} of them."

(3)   a. Sono uscito   per strada   e   ho   incontrato {uno / qualcuno}
        I have gone out in the street and I have met   {one / someone}
        "I went out in the street and I met {some guy[3]/ someone}"

     b. C'è   sempre qualcuno che non parla mai con nessuno.
        there is always someone that not talks ever with no-one
        "There are always people who never talk with anybody"

     c. {Uno / Qualcuno / Nessuno / Ognuno / ?Ciascuno} deve essere libero
        {one / someone / no-one   / everyone / each one} must be   free
        per essere felice.
        to be   happy.

The distribution of the partitive interpretation for the null-nominal forms is restricted: it is only available for preverbal subjects or topicalized direct and

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[3] The isolated null-nominal form *uno* is slightly sub-standard.

indirect objects (the three case are illustrated in 2(a–c) respectively).[4] In all other positions, an explicit partitive form (e.g. *qualcuno di essi* lit. "someone of them") must be used to obtain the same meaning. If *di essi* is missing, the free, [+HUMAN, +MASC] interpretation is forced. Thus, (2b) contrasts with (4), whose only meaning without *di essi* is that I have photographed *people* – a *non sequitur* in the context.

(4) Ieri   dei   pappagalli$_i$ si sono fermati sopra al tetto.
  yesterday some parrots$_i$ stopped   over the roof.
  (Non) ho   fotografato {uno /
  (not) I have photographed {one /
  qualcuno / nessuno / ?ciascuno / ognuno}   *(di essi$_i$).
  someone / no-one   / each one / everyone}   (of them).

Turning to the determiner forms in Table (1), their nominal restrictions can in some cases be replaced by the clitic pro-NP *ne*, optionally coindexed with a topicalized bare nominal under *di* "of", as in (5).

(5) a. Di {ragazze$_i$ / ragazza$_i$}, non ne$_i$ conosco nessuna.
    of {girls$_i$ / girl$_i$},   not NE I know   none.
    "girls, I know none"

  b. Di {piante$_i$ / ?pianta$_i$}, non ne$_i$ ho   annaffiata alcuna.
    of {plants$_i$ / plant$_i$}, not NE I have watered   any
    "Plants, I haven't watered any."

  c. Di {piante$_i$ / ?pianta$_i$}, ne$_i$ ho   annaffiata (solo) qualcuna.
    of {plants$_i$ / plant$_i$}, NE I have watered   (only) some
    "Plants, I have (only) watered some."

The -*uno* morpheme is obligatory in all *ne*-pronominalization cases, but impossible when *qualche* is preceded by *un*; as a consequence, there is neither a null-nominal nor a *ne* form for the existential *un qualche* + N "A SOME N":

(6)   *(Ne) ho   visto un qualc(uno).
    (NE) I have seen a   some(one)

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[4]It might be possible to unify this condition, treating the subject position as a hidden left-topicalized structure with a small *pro* in the canonical subject position. One problem with this is that objects with universal and negative determiners cannot normally appear as topics (i)(hence their absence in 2b).

((i)) a. *Quanto ai   pappagalli, ognuno$_i$ sono riuscito a fotografarlo$_i$.
    as   for the parrots,   everyone$_i$, I have managed to photograph-it$_i$

  b. *Quanto ai   pappagalli, nessuno$_i$ (non) sono riuscito a fotografarlo$_i$.
    as   for the parrots,   none$_i$,   (not) I have managed to photograph-it$_i$

Thus, the status of these forms in the putative subject left-topicalization remains unclear.

The paradigm is completed by *alc-uni/e*+N, which is plural, and equivalent to the English *some_{plur}*. Its null-nominal form, *alcuni/e*, is partitive in meaning: it can only mean "some*_{plur}* out of a set of contextually salient entities". Again, this meaning is available only in the left-topicalized or pre-verbal subject positions, exactly as in (2). When no partitive coindexation has been set up or can be inferred, null-nominal *alcuni* is deviant, in contrast with *qualcuno* (7a). (7c), for instance, cannot mean "the priest married some people".

(7)   *Context: answer to "What happened today in this church?"*

    a. Qualcuno   deve   essersi   sposato
         someone   must   have gotten married

    b. *Alcuni   devono essersi   sposati
         some*_{plur}* must have gotten married

    c. *Il   prete deve aver sposato alcuni.
         the priest must have married some*_{plur}*

These data show that null-nominal forms are subject to more restrictions than determiner forms: we have cases where only the determiner form is possible (singular *alcuno*, *qualsiasi*), and cases where it is possible when *-uno* takes either a partitive meaning (a form of coindexation with a nominal), or a free meaning with features [+HUMAN, +MASC]. For unclear reasons, the implicit partitive meaning is available only in certain positions.

What the data suggest is that the DP, perhaps the D position itself, requires a combination of features to be licensed, some of which are normally contributed by N, by its pronominal counterpart *ne*, or by a partitive (overt, like *di loro* or implicit). When N is missing, the necessary features are jointly provided by *-uno* (since the morphemes *ogni*, *qualche* and *ciasc-* cannot function as null-nominal forms) and by the Wh-/quantificational features associated with *qualcuno*, *ognuno*, *qualsiasi* or *ciascuno* (since *alcuno*, which has no visible features of this sort, cannot serve as a null-nominal form).

Having distinguished between various types of null-nominal forms allows me to define the scope of the semantic remarks in the rest of this paper: they are meant to apply to *qualche*+ N, to the *ne* clitic cases (*ne ... qualcuno*, see (5)c) and to null-nominal *qualcuno* with a partitive interpretation (2), but not to the free null-nominal *qualcuno* in (3) (see however ft. 9).

Turning to the structure underlying these forms, I will adopt the DP schema in Heycock and Zamparelli (2005) (8).

(8)   [_{DP} *quantifiers* [_{NumP} *cardinality predicates* [_{PIP} *operators* [_{NP} N]]]]
     basic schema

Cardinal numerals (including "uno") are base-generated in NumP. Adjectives can be inserted in various positions (possibly within additional functional

projections, not represented here), subject to various semantic and/or syntactic constraints. The only constraint relevant for this paper is the distinction between *restrictive* and *non-restrictive* material: following Bernstein (1993), and much work on relative clauses (see e.g. Bianchi 2002), I will assume that non-restrictive modifiers must attach outside the domain containing the noun and all its restrictive modifiers:[5]

(9)   [*determiners* [*non-restrictive modifiers* [*restrictive modifiers* N *restrictive modifiers*]]]

For concreteness, in the structure in (8) the edge of PlP (or of some projection above PlP but below Num) will be assumed to be the boundary of the domain within which modifiers can receive a restrictive interpretation.

Assuming the structure in (8), Heycock and Zamparelli (2005) propose that singular quantifiers can appear below other determiners because they are not generated in D, but inserted in a DP-internal functional projection, PlP, which is the level at which a plural denotation can be constructed. In this theory, singular determiners are singular because in complementary distribution with the covert operators in the Pl head which take in input the noun denotation (a set of singulars) and generate a plural denotation (a join semilattice structure).[6]

Building on this idea, I propose that the head *qualche/nessuno* moves to NumP, where the features of the morpheme *-uno* are checked (10), and from there to D, where *qualch-* checks its quantificational features (e.g. the [+QU] of Heycock and Zamparelli 2003). The free null-nominal form is analogous, modulo the absence of NP and the presence of [+HUMAN, +MASC] features (11). *Un qualche* will be rendered as in (12), with *uno* in NumP and *qualche* in its base position.[7] We automatically obtain the non-existence of *un qualcuno, since *uno* could not check its features in Num, due to the presence of *un*.

(10)   a. [$_{DP}$ D^e [$_{NumP}$ Num [$_{PlP}$ **qualch-uno/ogn-uno/ness-uno/ciasc-uno** [$_{NP}$ N]]]]   *base*

        b. [$_{DP}$ **qualche**$_i$ [$_{NumP}$ t_i [$_{PlP}$ t_i [$_{NP}$ N]]]]   *"qualche" in D*

        c. [$_{DP}$ **ness-uno**$_j$ [$_{NumP}$ t [$_{PlP}$ t_j [$_{NP}$ N]]]]   *"nessuno" in D*

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[5]For the present purpose, a modifier M of a noun N is restrictive iff [M]∩[N] ⊂ N; this is sufficient for *intersective* modifiers (e.g. *carnivorous* in *carnivorous plant*). *Subsective* adjectives (e.g. *big*, in *big galaxy* and *big ant*, where *big* will take the meaning "big_for_a_galaxy" and "big_for_an_ant", respectively) and *intensional* ones require a more complex treatment, which is outside the scope of this paper.

[6]The singularity of these quantifiers could also follow if they were lower than PlP (i.e. within what I tag "NP"), if we assume that an operator in Pl would interfere with the raising of the quantifier.

[7]Alternatively, *un qualche* could be a single complex lexical item which moves as a unit to NumP. This idiomatic analysis seems less likely in light of the (somewhat marginal but well attested) possibility of inserting an inflected possessive adjective between the article and *qualche* (e.g. *una sua qualche attività* "a his SOME activity").

(11)   [$_{DP}$ **Qualch-uno**$_{[+\textbf{HUMAN},+\textbf{MASC}]_j}$ [$_{NumP}$ t [$_{PlP}$ t_j]]]

null-nominal case

(12)   [$_{DP}$ D^e [$_{NumP}$ **un** [$_{PlP}$ **qualche** [$_{NP}$ N]]]]

One syntactic assumption which will play a crucial role in the analysis is that the head *qualche* may be interpreted at NumP (the canonical position for indefinite determiners), or 'reconstructed' from D/Num to the base position Pl, and interpreted there. A technical alternative – more in the spirit of Minimalism – is to think of (10), (11) as involving movement of formal features alone. Either way, when *un* is in Num *qualche* will be obligatorily interpreted in PlP; when Num is empty, the place of interpretation is optional.

Let's now turn to a comparison of the semantic and distributional properties of *qualche*.

3. SEMANTIC PROPERTIES

3.1. Plural or Singular "Qualche"?

The most striking aspect of the semantics of *qualche* is probably the fact that this expression selects a singular count noun, but its meaning is normally *plural*, much like the meaning of plural *some/a few*. In the following cases, *qualche* means "an indeterminate (but typically small) number", greater than one:

(13)   a. Ho   appena sposato qualche ragazza.   *I must be polygamous*
             I‿have just   married SOME   girl
             "I just married some/a few girls"

         b. Ho   qualche fratello.   *>1 brother*
             I‿have SOME   brother
             "I have some/a few brothers"

         c. Per vincere, devo   fare   ancora qualche punto.   *>1 point*
             to win,   I‿must score still   SOME   point
             "To win, I must still score a few points"

Qualche can also introduce measure phrases, with meaning *a few*:

(14)   a. Marco pesa   qualche chilo di   troppo
             Marco weighs SOME   kilo   too   much
             "Mario weighs a few kilos too much"

         b. Camminammo per qualche chilometro
             we‿walked   for SOME   kilometer
             "We walked for a few kilometers"

Similarly, partitive *qualcuno* cannot refer to a proper part of a group with two elements, since such a referent could only be singular:

(15)   *Ho   visto qualcuno di quei due pappagalli.
        I have seen SOME   of those two parrots

Turning to binding facts, *qualche*+N allows plural intersentential anaphora[8] (16), but within the sentence it binds a singular pronoun (17).

(16)   a. Ho   comprato qualche rivista.   Sono nella borsa.
           I_have bought   [SOME magazine]$_i$. (They$_i$) are   in_the bag

        b. Ho   notato [qualche errore]$_i$ qui e lì.   Spero di averli$_i$
           I_have noticed [SOME mistake]$_i$ here and there. I_hope to have_them$_i$
           marcati   tutti.
           marked$_{plur}$ all
           "I noticed some errors here and there. I hope to have marked them all."

(17)   [Qualche dirigente]$_i$ voleva parlare subito   con il suo$_i$/*loro$_i$
        [SOME   manager]$_i$ wanted to speak immediately with the his$_i$/their$_i$
        avvocato.
        lawyer
        "Some managers wanted to speak immediately with their lawyer"

However, in 'donkey'-anaphora *qualche* can be picked up by a singular pronoun:

(18)   Se ho   qualche spicciolo in   tasca,   te lo metto sul
        If I_have [*some* coin]$_i$ in the pocket, (I) CL **it**$_i$ put   on the
        cruscotto.
        dashboard
        "If I have coins in the pocket, I will put them on the dashboard"

The pattern in (16) and (17) is common to *every*, another quantifier with a syntactically singular restriction which normally ranges over more than one object (cf. [*every student*]$_i$ *discussed* [*his$_i$ assignment*]$_j$. *Overall, they$_i$ found them$_j$ difficult.*). *Every*, however, notoriously fails to serve as an antecedent in 'donkey'-anaphora like (18). I will return to the significance of this fact in Section 7, where I will address the question whether *qualche* is a genuine quantifier or an indefinite.

One important aspect in which *qualche* differs from *every* is that there are many natural contexts where *qualche*+N allows either a singular or a plural interpretation. Adding the indefinite article *un* before *qualche* forces a singular meaning. In the rest of this section I will give a few examples of these contexts.

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[8]This is somewhat marginal for some speakers, but any speaker I have asked finds it better than the same example with *singular* anaphora.

First, in subject position, the plurality is more a preference than a requirement, and it partly depends on the lexical choice of verbs (19).

(19)   Qualche studente mi ha   {?riconosciuto / ?salutato / ??sposato}.
        SOME   student me has {recognized   / greeted   / married}
                                                          '1 student' meaning
        "Some student or other has {recognized / greeted / married} me"

In object position, a singular meaning is perfectly acceptable in intensional contexts such as the antecedent of conditionals, future, optative and interrogative clauses (20) (from Longobardi 1988), and declaratives with an epistemic "must" (21).

(20)   a. Se incontri   qualche avvocato alla   festa, fatti aiutare.
           if you_meet SOME   lawyer   at_the party, ask for help
                                                  (*one is sufficient*)
           "If you meet lawyers at the party, ask for help"

        b. Mario troverà pure   qualche donna che lo ami,   prima o
           Mario will_find indeed SOME   woman who him loves, sooner or
           poi.
           later
           "Mario will sooner or later find some woman or other who loves him"

        c. Magari fosse riuscito finalmente a trovare qualche donna che
           if only he_had managed finally   to find   SOME   woman who
           lo   amasse!
           him loved!
           "If only he had managed to find some woman or other who loved him!"

        d. Ha   poi trovato qualche donna che l'   ami?
           has_he then found   SOME   woman who him loves?
           "Did he eventually find some woman who loves him?"

(21)   a. Qualche donna deve pur   aver partorito questo bambino.
           SOME   woman must after all have delivered this   baby
           "Some woman or other must have delivered this baby"

        b. Questo bambino deve pur   essere il figlio di qualche madre.
           this   baby   must after all be   the son of SOME   mother
           "This baby must be the son of some mother"

        c. La madre deve essere da qualche parte.
           the mother must be   in SOME   place.

Here the plural interpretation for *qualche* is still available in principle, but it is sometimes ruled out by world knowledge.[9] The complex determiner *un qualche*, on the other hand, is strictly semantically singular. It can replace *qualche* in object positions in 20 and 21, with little or no meaning difference, see e.g. (22) and two examples from the WWW, in (23).[10]

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[9]In its free meaning, the null-nominal *qualcuno* favors a singular reading. Contexts which force a plural interpretation for *qualche*+N have no effect on *qualcuno*$_{[+\text{HUMAN},+\text{MASC}]}$, as illustrated by the minimal pair:

((i))	a.	Ho	sposato qualche ragazza che conosci.	*cf. 13a: only '>1 girl' meaning*
		I_have married SOME girl that you-know		
		"I married some/a few girls you know."		
	b.	Ho	sposato qualcuno che conosci.	*cf. 13a: '1 person' meaning OK*
		I_have married SOMEONE that you-know		
		"I married someone you know."		

The singular meaning seems to be conversationally implied by *qualcuno*, but this implicature can easily be overridden (iia). This is not possible in those context where *qualche*+N has a plural meaning: (iib) is contradictory.

((ii))	a.	Ho	visto qualcuno, ma non più di 3 o 4 persone.
		I_have seen someone, but not more than 3 or 4 people	
	b.	#Ho	qualche fratello, ma in effetti solo uno.
		I_have SOME brother, but in fact only one	

These data are compatible with the analysis proposed in the following sections (see footnote 21).

[10]There is a distributional difference between *qualche* and *un qualche*: the latter is marginal in pre-verbal subject positions even in the relevant singular-inducing contexts (i).

((i))	a.	?? Un qualche docente deve essere svizzero / uno straniero.
		A SOME teacher must be Swiss / a foreigner.
	b.	??Un qualche studente ha telefonato?
		A SOME student has phoned?

The judgment is confirmed by a search of the occurrences of "un qualche" in Italian web pages: when subject, this form always appears post-verbally. We can make some sense of this difference starting from the structures proposed for *un qualche*, repeated here:

((12))   [$_\text{DP}$ D^0 [$_\text{NumP}$ **un** [$_\text{PIP}$ **qualche** [$_\text{NP}$ N]]]]

The distribution of this forms is restricted to those environments where empty heads are independently licensed (roughly, objects of verbs and prepositions, and certain types of post-verbal subjects, see Zamparelli (2000)). This suggests that with *un qualche* the D head, which is normally licensed by the determiner, remains empty, possibly because *un* blocks movement of *qualche* (or of its abstract features) to D. I speculate that this effect might be due to the Wh- features of *qualche*, since the parallel construction *un certo* "a certain" has no distributional restrictions.

(22)   Se incontri   un qualche avvocato alla   festa, fatti aiutare.
        if   you_meet A SOME   lawyer   at_the party, ask for help
                                                    1 is enough, see (20)a

(23)   a. Johnny somigliava a un qualche personaggio di   un qualche film
           Johnny resembled   A SOME   character   from A SOME   film
                                                              Google

           "Johnny resembled some character from some film"

        b. A meno che non si verifichi un qualche intoppo: un gene[...]
           unless   not arises   A SOME   problem: a gene[...]
           oppure un qualche fattore ambientale.
           or   A SOME   factor environmental
           "...unless some problem or other doesn't arise – a (defective) gene or
           some environmental factor"

The differences between *qualche* in (13)–(14) and *(un) qualche* in (20)–(23)
are not limited to number. Pretheoretically, we could describe their meanings by
saying that in plural[11] usages *qualche* contributes the meaning of "an indeterminate
small number of", while a singularly interpreted *(un) qualche* nominal conveys
indeterminacy of the *identity* of the object referred to. Specifically, singular *qualche*
seems to pick out an object whose sortal identity cannot or does not need to be
determined beyond the content of the restrictor itself.

This contrast manifests itself in the possibility of elaborations (*cioè* ... "namely"),
which are much stranger with singular *(un) qualche* (24b, c), even in those inter-
rogative or conditional contexts where the singular reading is otherwise natural.

(24)   a. Ho   incontrato qualche compagno di scuola, cioè   Vito,
           I_have met   SOME   schoolmate,   namely Vito,
           Stefano e   i loro amici   della IV-B
           Stefano and their friends from IV-B.
           "I met some schoolmates, namely Vito, Stefano and their friends
           from IV-B"

        b. Hai   incontrato un qualche compagno di scuola
           have_you met   A SOME   schoolmate
           ??(, cioè   Vito)?
           ??(, namely Vito)?

        c. Se incontrassi un qualche compagno di scuola ??(, cioè
           if you_met   A SOME   schoolmate   ??(, namely
           Vito), fammi sapere.
           Vito), let_me know

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[11] Here and below I will use the terms "plural" and "singular *(un) qualche*" purely in their semantic
sense. Syntactically, *qualche* is always singular.

cf. "If you meet some schoolmate or other, namely Vito, let me know".

The elaborations show that the speaker has a very precise idea of who the hearer might meet, but this contrasts with the indeterminacy associated with singular *qualche*.

Additional evidence for this effect comes from measure phrases. The meaning of units of measure is perfectly determined (e.g. *kilo* denotes, say, a specific function from objects/places to numbers), and cannot be made any more or less specific. As a result, in (25) singular *un qualche* is redundant (the nominal is already fully identified), and deviant, while as seen in (14) *qualche* with a plural interpretation is fine.

(25)   Il   pacco pesa   (*un) qualche chilo?
          the pack   weighs (A) SOME   kilo?
          cf. "Does the pack weigh some kilo?"

The meaning of singular *qualche* is not isolated. The Italian form *un qualsiasi*+N seems similar to *un qualche*+N, whereas *qualsiasi*+N has a quasi-universal meaning similar to that of free-choice *any* in English (Chierchia 2006). Cross-linguistically, the Spanish indefinite determiner *algun* has been said to have an "epistemic free choice" meaning (Alonso-Ovalle and Menéndez-Benito 2003) which seems virtually identical to singular *(un) qualche*. German *irgendein* (Kratzer and Shimoyama 2002), French *un qualconque* (Jayez and Tovena 2002) seem also closely related. Yet, none of these latter forms has the plural meaning we see in e.g. (13), probably a reflex of the fact that *alg-un, irgend-ein* and *un quelconque* all contain a morpheme meaning "one".[12] The challenge, then, is to give an analysis of *qualche* which can account for the alternation between what we can call the "plural numeral" meaning and the "epistemic free choice" meaning.

3.2. A Scale-Based Analysis for Plural "Qualche"

My proposal is that the two meanings are a reflex of the two DP-internal positions *qualche* can occupy: when interpreted in PlP, *qualche* takes the NP as its argument and functions as a domain widener, giving the "free choice" effect, much as it has been proposed for *algun*, *irgendein* and *qualsiasi*. When interpreted in NumP/DP, *qualche* has no special effect on the restriction and is treated as an existential quantifier. The plural meaning – I will argue – comes from a pragmatic inference. But the two meanings are not available in the same contexts: domain widening has a

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[12] French *quelque(s)*, on the other hand, has specialized for the plural meaning (cf. English *some_{plur} people*), leaving the free-choice meaning to *un quelconque*. I suggest that *quelque(s)* is generated in Num and not Pl (since it can follow a definite in *les quelques*, but not an indefinite), possibly due to the fact that with *quelque* in Pl French might be unable to license the empty Num and D positions, much as in the case of bare plurals (see e.g. Delfitto and Schroten (1992)).

purpose only in certain modalized contexts; outside those contexts, the epistemic free-choice meaning is unavailable and only the plural numeral meaning survives.

To spell this out, consider (26) as a candidate for a logical meaning common to all our indefinite DPs, setting aside for the moment the question whether (25) comes from the lexical meaning of the determiners, or from some type of existential closure.

(26) $[[[_{DP} \mathbf{Det}_{indef} \text{ XP}]]] = \lambda \text{ Q}[[[\text{XP}]] \cap \text{Q} \neq \emptyset]_{\langle\langle et\rangle t\rangle}$

In Italian, DPs introduced by *un* "a", *almeno un* "at least one", *qualche*, "SOME", *uno o più* "one or more", *più di zero* "more than zero", etc. will all have (26) as their semantic value proper (modulo the fact that the last two will range over plural noun denotations). To obtain the fact that different indefinite determiners differ in meaning, I propose (with Krifka 1999, Landman 2003, among others) that each determiner may adds to this basic logical component of meaning additional logical requirements (e.g. a filter for a specific cardinality), plus a set of pragmatic constraints, whose net effect is to make the information conveyed by its use compatible with Grician maxims, and minimize the overlap between the meanings of distinct forms.

A well-known example of such constraints is scalar implicatures based on Horn scales. The standard account of why *a man arrived* suggests that not more than one man has arrived relies on Grice's maxim of Quantity (see e.g. Levinson 1983): if the speaker had the information that more than one person had arrived, it would have been more informative to say so (since the arrival of more than one person entails the arrival of one). As a result, the hearer infers that the speaker has no evidence for the arrival of more than one person, or has evidence to the contrary. This implicature must of course be blocked for *at least one* or *one or more*, or these forms would end up being synonymous with *a/one* (see Krifka 1999 for a way to implement this idea).

Deciding whether two elements are in a Horn scale is a delicate matter. The first requirement, it seems, is that they can be seen as part of a paradigm, a class of expressions with some formal or semantic similarities. The second requirement is that the meaning of one element must entail the meaning of the other. The third is that the two expressions must be able to apply to the same type of arguments; in other terms, the speaker can evaluate the pragmatic effect of using an expression A rather than B at a certain point in the derivation only if both A and B are applicable at that point. When meaning types are tied to syntactic positions, this can lead to cases where heads of distinct phrases simply cannot be compared: in an abstract structure such as (27) where A dominates the attachment point for B, A and B can be in a scale only if α and β – their respective arguments – have the same semantics, which will generally not be the case.

(27) $[\mathbf{A} \ [_{\alpha} \ ... \ [\ \mathbf{B} \ [_{\beta} \ ... \ ]]]]$

With this in mind, let's consider the semantics of *qualche*. Relativizing the meaning to the position in which this word is interpreted, we have two cases: *qualche$_{num}$* (interpretation at the level at which indefinites like *un/a* are normally evaluated) and *qualche$_{pl}$* (interpretation at PlP, below the indefinite level). The latter is forced when *qualche* is preceded by the indefinite article.

Consider *qualche$_{num}$* first. In a maximally economical theory, nothing should be said about the semantics of *qualche*: by hypothesis, its logical meaning should be the existential quantification in (28) applied to the domain of *qualche* at the point of interpretation (i.e. the Pl projection). But this is just the meaning of *un PlP*: any semantic difference between *qualche* and *un* must thus follow from their different pragmatic effects.

$$(28) \qquad [[[_{\text{NumP}} \text{ qualche}_{num} \; [_{PlP} \; t \; \text{NP}]]]]^{w,g} = \lambda Q[[[\text{PlP}]] \cap Q \neq \emptyset]$$

Let's see how. Hearing *qualche$_{num}$ persona è arrivata*, the hearer should assume that the speaker has provided the most informative statement compatible with his or her knowledge. This time, however, the hearer cannot conclude that only one person has arrived, since if the speaker had known that much, he or she would have used the indefinite article *un*. Evidently, *qualche* competes with *un* for the singular meaning. The question is why it loses.

The answer I propose is that morphological complexity counts as a metric for such cases: the least informative meaning, the singular, is won by the element with the simplest morphological composition, i.e. the article *un*, in contrast with *qualche*, the combination of the complementizer with the Wh- features. Seen the other way round, a non-singular, more informative meaning is assigned to the marked *qualche* rather than to the unmarked *un*.

Along a different scale, this time measuring specificity of information, *qualche* competes in one direction with *more than one*, which has a completely non-specific, evenly distributed disjunctive meaning ("two or three or ..."), in the other, with the cardinal numbers and the vague numerals *parecchi* "several", *molti* "many" and *pochi* "few" (all of which must add to their basic existential meaning some further specification about small/large cardinality). The resulting 'paucal' meaning of *qualche$_{num}$* is thus framed between the meaning of the singular indefinite article and the more specialized meanings of 'multal' expressions and cardinal numbers.[13, 14]

As we shall see in section 4, this scale-based derivation has consequences for the behavior of *(un) qualche* in downward-entailing environments.

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[13] Of course, *qualche* could not mean any *specific* cardinal number, since if the speaker had known a specific value a more informative cardinal could have been used.

[14] The fact that the meaning of *qualche* is essentially defined by negation over the meaning of more specialized or more basic determiners might help understand why it cannot be intensified with adverbs (i), or compared (ii):

((i))   Questo bimbo ha davvero {molti / pochi / *qualche} dentino/i.
          this   baby has really   {many / few   / *SOME}   small tooth/teeth

3.3. Domain-Widening "Qualche"

Let's now turn to the semantics of the epistemic free-choice *qualche*$_{pl}$, taking the lead from Alonso-Ovalle and Menéndez-Benito (2003) treatment of *algun*, in turn based on Kratzer and Shimoyama's (2002) account of why *irgendein* must be in the scope of a modal.[15]

The starting point is the DP structure in (29), with all restrictive adjectival modifiers NP-internal, plus the assumption that the overt nominal restriction, contributed by the the denotation of NP, can be narrowed down by the effect of additional *implicit* restrictions generated by the utterance context.

(29)   [$_{DP}$ (Det) [$_{NumP}$ (*indef*) [$_{PIP}$ (*qualche*) [$_{NP}$ (*modifiers*) N (*modifiers*)]]]]]

Suppose that the context in which an utterance takes place can be seen as a reservoir of properties (the "domain properties") which can be conjoined with the denotation of the nominal, narrowing it down. Let's call the composition of the overt NP denotation with the implicit domain properties the "final restriction". Two questions immediately arise: at which point the domain properties are intersected with the NP denotation, and which sort of properties the context provides.

We can think of domain properties as "implicit attributive modifiers" that must be added to overt N modifiers (adjectives, PPs, relatives). Let's assume that, as for all other modifiers, their meaning is combined with the meaning of the noun incrementally, beginning from the modifiers closest to the noun and moving outward, in a compositional fashion. It turns out that the point at which domain properties are added makes a large difference for semantic processing. To see why, consider the following case. I utter:

(30)   Every Albanian child is male.

Taken at face value, (30) is obviously false, a signal that some implicit restriction must be added. The context is one where we have been talking about two classes of children in the local kindergarten, classes A and B. The situation is as in (31).

((ii))   a.   C'   è qualche straniero in Libano, *(in confronto   all' Iraq)
                there is some   foreigner in Lebanon (in comparison to   Iraq)

                (cf. "There are a few foreigners in Lebanon (*in comparison to Iraq)")

          b.   Ci   sono molti / pochi / parecchi stranieri   in Libano,   in confronto   all' Iraq
                there are   many / few   / several   foreigners in Lebanon, in comparison to   Iraq

Here *qualche* clearly patterns with *a few* (while *a small number of foreigners* patterns with *few* in (iib), *pace* kayne's 2007 attempt to reduce *a few* to *a small number*).

[15]I will use a different formalism from the one in Kratzer and Shimoyama (2002), who are less specific on the assignment of meaning to layers. Their analysis of *irgendein* could be recast as [$_{NumP}$ -ein [$_{PIP}$ irgend- NP]] plus movement of *irgend* to *ein*, and semantic reconstruction of *irgend-* to its lower position.

(31)   a. children in kindergarten = {a, b, c, d, e, f, g, h, i}

        b. in class A = {a, b, c, d}

        c. in class B = {e, f, g, h, i}

        d. Albanians = {h, i, j}

As a first attempt, suppose that no particular order of insertion for implicit modifiers is specified. As a result, some of the domain properties will end up being added *before* all the overt modifiers have been processed. The problem with this solution is that implicit modifiers, being the result of inferences and guesses over the mind states of discourse participants, are far more unreliable than explicit ones; if the wrong implicit modifier is chosen and inserted early in the derivation it can preempt the contribution of overt material later on. For instance, suppose that I guess that the quantification in (30) is to range only over children *in class A*. I intersect [[children]] with [[class A]], obtaining (31b). Now if I intersect further with [Albanian], I obtain the empty set – an impossible restriction. I have to "undo" the intersection, select [[class B]] as a domain property and finally derive a well-formed intersection: {h,i}, excluding just {j}.

What this example shows is that domain properties should be added *after* the noun's denotation has been combined with all its overt modifiers. Only at this point can I try out different potential domain properties without backtracking, or decide that none is needed after all. The syntactic corollary is that context-induced restrictions should be added at the edge of the domain for restrictive modification, that is, in the present framework, at the edge of PlP.

The next question concerns the nature of contextual properties. Some have to do with what the speaker "has in mind" or "finds salient" in the domain of discourse, while others express what the speaker knows about the mind of others. Consider (32).

(32)   a. "I am looking for a man" (says John)

        b. John is looking for a man

Uttering (32a), John might intersect [[man]] with, say, [[person I$_{John}$ have in mind]], obtaining a restriction true only of the particular person he is looking for. But if I have heard (32a) and I am convinced that John is looking for a specific person, I could report this fact as (32b), where the final restriction is given by intersecting [[man]] with [[person John has in mind]]. Obviously, I might have no idea whatsoever of which person John has in mind, thus no idea about who the final restriction ends up picking; but this is not at all different from the denotation of many overt restrictions, such as *top winning number at next year's national lottery*. Yet, in both cases I do know one thing, namely that the final restriction is going to be true of a single entity.

Seen intensionally, the difference between (32a) and (32b) is that in the former the final restriction [[NP]]∩P, with P = [John has in mind x], will be true of the

same individual (in some trans-world identity sense of *the same*) in all worlds compatible with John's beliefs, while in the latter the change of speaker makes the denotation of $[[NP]] \cap P$ be different in every world compatible with the new speaker's beliefs. It will always be, however, a singleton property.

The linguistic importance of restrictions which apply to just one object (even when we are unable to say to which object they apply in the actual world) is reflected by the existence of modifiers such as *certain*, which arguably signal to the hearer the presence of a final restriction that is a singleton property (see a similar analysis in Jayez and Tovena 2002).[16]

(33)   [*a certain NP*] presupposes that there is a contextually salient P such that $|[[NP]] \cap P| = 1$

We are now in a position to consider the effect of *qualche$_{pl}$*: my proposal is that this expression preempts the combination of NP with the contextual properties by combining with the NP denotation right before contextual restrictions can be applied, at PlP. Thus, for all possible worlds w and variable assignments *g*, with $\mathbf{C}^{w,g}$ the set of contextually salient properties and Pl a functional head in the PlP layer, we normally have the NP in (34a) interpreted as in (34b) at the next level up. With *qualche* in Pl, the situation is instead (34c).

(34)   a. $[[[_{NP} \text{ man}]]]4^{w,g} = \{x \mid x \text{ is a man in } w\}$

       b. $[[[_{PlP} \text{ Pl NP}]]]^{w,g} = [[Pl]]([[NP]]^{w,g} \cap \mathbf{P}^{w,g})$ for some P in $\mathbf{C}^{w,g}$, when Pl $\neq$ *qualche*; otherwise:

       c. $[[[_{PlP} \textit{qualche} \text{ NP}]]]^{w,g} = [[\textit{qualche}]]([[NP]]^{w,g})$[17]

If on the other hand *qualche* is interpreted outside PlP, the denotation of NP is intersected with the domain property as in [b], and then fed to the existential. This way, the "domain widening" effect of *qualche* is triggered on and off, depending on the LF position of its source.[18]

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[16]This idea immediately extends to (i), which had to be dealt with separately in Hintikka's 1986 original analysis, under the assumption that proper names preceded by indefinites behave like common nouns: (i) expresses the proposition that there is a John Mainard at the door and that there is a property P which, intersected with the set of people named John Mainard, gives me a property uniquely satisfied by the individual at the door.

    ((i))   There is a certain John Mainard at the door.

  More needs to be said, but I have to leave *a certain* on the side in this paper.

[17]The way contextual properties are selected is a separate issue, which I will not address here. The existence of 'null contexts', cases where intersecting the overt restriction with the context does not reduce the NP restriction, can be modeled by assuming that D, the set of all possible individuals, i.e the most general property, is a member of $\mathbf{C}^{w,g}$.

[18]To remain within standard terminology I will continue to call "domain widening" the effect of *qualche$_{plp}$*, but it should be clear that the effect of *qualche* is actually that of *blocking context-induced domain narrowing*.

The logical value of an indefinite DP containing *qualche$_{pl}$*, whether preceded by *un* or not, is again the broad existential seen in (26). But the presence of *un* makes a difference with respect to whether a plural interpretation is possible at all, as illustrated by the minimal pair:

(35)   A giudicare dalla sua improvvisa ricchezza, si   direbbe   che
       judging   from his sudden   wealth,   one would‿say that

    Mario abbia vinto...
    Mario has   won...

      a. un qualche lotteria.   *"**a some** lottery"* one at most

      b. qualche lotteria.   *"**some** lottery", one or more*

Again, this follows from pragmatic principles. In (35a) the presence of *un* makes the DP participate in the Horn scale of numerals, as described above; by scalar implicatures, *un qualche NP* obtains a singular reading. In (35b) *un* is missing and *qualche$_{pl}$* licenses NumP/DP, functioning as a full-fledged determiner. This time, however, *qualche* is not in the same pragmatic scale with the indefinite article, since their restrictions are now different: the restriction of *qualche$_{pl}$* has been "widened", that of the indefinite article and other numerals has not. *Qualche$_{pl}$* conveys a meaning of indeterminacy and it is no longer comparable with other indefinite determiners. As a result the singular meaning is not blocked pragmatically and the DP can be semantically singular or plural.

To see the interaction of *(un) qualche$_{pl}$* with a modal, it is convenient to switch to Kratzer and Shimoyama's (2002) Hamblin semantics for indefinites. In Kratzer and Shimoyama's proposal, indefinites are never existentially closed, but denote *sets of alternatives*. Suppose that this set is available at NumP and DP:

(36) $[_{\text{NumP/DP}}$ una $[_{\text{PIP}}$ qualche $[_{\text{NP}}$ donna$]]]^{w,g} = \{$Anna, Maria, Carla, ... $\}$
       for all the women in D at w

A predicate applies to an indefinite DP by applying 'pointwise' to all of its members, in $\mathbf{R}_s$, generating a set of propositions.

(37)   a. A girl come to the party.   *cf. Alonso-Ovalle and Menéndez-Benito 2003*

      b. $\mathbf{R}_s = \{$Anna, Carla$\}$,
       $[[[$came to the party$]]]^{w,g}([[[$a girl$]]]^{w,g}) =$
       $\{\ \lambda w'[$Anna came to the party in $w'],$
       $\lambda w'[$Carla came to the party in $w']\ \}$

Modals operate on the set of propositions. A set containing a modal (e.g. an epistemic operator such as *IT IS COMPATIBLE WITH MY BELIEFS THAT ...*) is true at w iff for each world w' epistemically accessible from w, there is at least one

proposition in the set the modal operates on which is true at w'.[19] Since *qualche$_{pl}$* (like *algun*) blocks the application of contextual restrictions, an indefinite containing *qualche$_{pl}$/algun* generates a larger set of propositions than a simple indefinite. The crucial step is now the assumption that domain widening must be done for a purpose (see Kadmon and Landman 1993 on *any$_{fc}$*): in particular, the propositions which are introduced in the denotation of a sentence of the form [[$_{DP}$ *un qualche* NP] PREDICATE] *in virtue* of the presence of *qualche* must all be true in some of the worlds epistemically accessible to the speaker. To see a case where this condition fails, consider:

(38)   #Ho   sposato una qualche ragazza.   *cf. (13)a*
         I_have married A   SOME   girl

Suppose, with Alonso-Ovalle and Menéndez-Benito (2003), that a statement of this sort are implicitly epistemically modalized by an operator which indicates *partial* knowledge. In modern Western societies, it is normally safe to assume that in all the worlds that represents what the speaker knows about a particular marriage of his or her, the bride/groom will always be the same. This simply formalizes the idea that, at least for a certain time after the wedding, I have total knowledge of *who* I have married. But the DP *una qualche ragazza* denotes the disjunction of all the girls in the domain, the vast majority of whom will have no place in my belief-worlds. Hence, *qualche* has been used without a purpose (saying *a girl* would have achieved the same effect). The infelicity of (38) follows.

Interestingly, a change in person may be sufficient to improve the sentence: (39) is more natural than (38), since it justifies the fact that the speaker might not know anything about the woman who has been married except for the fact that she has been married by Mario.

(39)   Mario ha   appena sposato una qualche ragazza
         Mario has just   married A   SOME girl

We can see the same pragmatic mechanism at work with overt disjunctions. Hearing (40a), the hearer concludes that the speaker does not know which of the two women has been married, but this lack of knowledge is harder to justify in (40b) – hence the oddness of the disjunction.

(40)   a.   Jack has just married Paula or Sue

        b.   #I have just married Paula or Sue

Going back to the contexts in which singular *qualche* is possible, we see that the contexts in (20)–(21), the antecedent of conditionals, optatives and interrogatives, all characterize states of incomplete knowledge on the part of the speaker, and therefore license *qualche$_{pl}$*. In other cases (e.g. (19), (23)), it must be the type

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[19] See Jayez and Tovena (2002) for an account in the same spirit, with different formal tools.

of predicate which allows for the possibility of incomplete knowledge.[20] But where the speaker must be assumed to have full knowledge of the identity of the indefinite (e.g. (13), (14)), free-choice *qualche$_{pl}$* becomes impossible. The only possibility interpretation is the vague numeral *qualche$_{num}$*, hence the plural-only meaning.[21]

Let's take stock. In this section I have proposed that the plural/singular alternation of *qualche* is due to two different pragmatic meanings for this words, linked to the place of interpretation. The situation is summarized in the following table:

Structure	Logical meaning	Pragmatic meaning	Semantic environment	Syntactic environment
$[_{NumP}$ qualche$_{num}$ $[_{PlP}\ t$ NP$]]$	$\lambda Q[[[PlP]]\cap Q \neq \emptyset]$	$\lambda Q[|[[PlP]]\cap Q|>1]$ plural: via scalar impl. with *un*	Non-downward-entailing (*see below*)	Unrestricted
$[_{NumP}$ un $[_{PlP}$ qualche$_{pl}$ NP$]]$	$\lambda Q[[[NP]]\cap Q \neq \emptyset]$	$\lambda Q[|[[NP]]\cap Q|= 1]$ singular: scalar impl. from *un*	Modals (from domain widening)	Lexically governed positions (see ft. 10)
$[_{NumP}$ Num $[_{PlP}$ qualche$_{pl}$ NP$]]$	$\lambda Q[[[NP]]\cap Q \neq \emptyset]$	$\lambda Q[|[[NP]]\cap Q|\geq 1]$ either: (no scalar impl.)	Modals (from domain widening)	Unrestricted

4. SCOPE

An account of the meaning of determiners based on scalar implicatures cannot be complete without some tests in downward-entailing (DE) contexts, where the usual scalar implicatures are reversed: the fact that I have not seen three people does not entail that I have not seen two, or one. Vice versa, if I have not seen one person, I have not seen two or three people either: 1 is now the most informative element in the scale. Recall that we had assigned the same logical meaning to *un*, *qualche* and other indefinites, i.e. $\lambda P\lambda Q[P \cap Q \neq \emptyset]$; scalar implicatures did the rest, with the least marked items (what we call the "indefinite article") taking the singular

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[20]Interestingly, in cases like (39) the indefinite *un* is obligatory to get the 'free-choice' singular meaning: when *un* is missing, the preferred interpretation is that Mario has married more than one girl at once. This shows that the *qualche$_{pl}$*-licensing epistemic operator we need to postulate for these cases is actually a last-resort device: it is introduced to salvage the sentence when we have the form *un qualche*, which can only be interpreted as a singular 'free choice'; in the absence of *un*, however, language prefers to let *qualche* be interpreted as a vague numeral rather than introducing the necessary epistemic operator.

[21] Returning to the behavior of the null-nominal form *qualcuno* exemplified in footnote 9, we can now assume that the *qualch-* of *qualcuno* is not the domain widener (since there is no restriction), but the 'plural numeral' *qualche*. The possibility of a singular meaning follows from the fact that the pronoun *qualcuno*, unlike *qualche*, is probably not in a comparison class with *uno*. When *uno* is a determiner, there is no structural similarity and thus no blocking; when it is a [+HUMAN, +MASC] pronoun it is not in the same stylistic register as *qualcuno*, see footnote 3.

meaning, the informational lower bound, and *qualche* selecting 'paucal' plural values, probably due to the effect of other, more specific expressions meaning "many", "several", etc. The reasoning which led to the exclusion of the singular meaning is no longer valid in DE-contexts. Here, *qualche*, *un* and *uno o più* "one or more" etc., end up being fully equivalent.

Language doesn't seem to favor semantic equivalence in the functional domain (particularly when the items involved have a different markedness status), and has various ways to resolve it when it arises. Scope is one of them; in some cases, $qualche_{num}$ can regain its plural meaning by moving outside the negative DE-environment at LF: in (41), for instance, we see it obligatorily taking scope over a clause-mate negation.[22] This gives *qualche* the appearance of a "positive polarity item".

(41)   Non   leggo qualche libro (p.es. quelli scritti troppo piccoli) *only* $\exists > \neg$
          I don't read SOME   book, (e.g. those printed too small)
          "There are some books I don't read (the others, I do)"

The effect is not always strong, but it is clear enough to be noticeable when outscoping negation is not an option, as it happens with measure phrases. (42) could not mean "there are some grams the letter does not weigh": as a result, the indefinites are forced to an odd-sounding narrow scope (it would have been more natural to say: the letter doesn't weigh a single gram), or to associate with the 'metalinguistic' negation (suggesting that the letter actually weighs zero grams).

(42)   ?La lettera non pesa   {qualche grammo / uno o più   grammi.}
          the letter not weighs {SOME   gram   / one or more grams}
          "The letter doesn't weigh {some grams / one or more grams}"

In principle, another solution to avoid the collapse of *qualche* and *un* in DE-environments would be to interpret *qualche* as $qualche_{pl}$. DE-contexts would not create a conflict between the pragmatic meanings of $qualche_{pl}$ and *un*, since the two remain distinct: the former widens the restriction, the latter doesn't. However, a negative environment *per se* does not license $qualche_{pl}$, as we see if in (41) we replace *qualche* with $un\ qualche_{pl}$ (43).[23] Scoping *un qualche* outside the negation wouldn't help here, since the required epistemic modal would still be missing.

(43)   a. ??Non ho risposto a una qualche domanda.
             I haven't answered   A SOME   question

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[22] I am setting aside another possible reading, where the negation associates with the determiner, giving roughly the meaning: "*qualche* is not the appropriate determiner to use in the the sentence *leggo qualche libro* 'I read some books'." This is 'metalinguistic' negation.

[23] According to Jayez and Tovena (2002), French *un quelconque*, which seems in many respects to correspond to *un qualche* is licensed by negation. I have no way to investigate this difference at present, though a way to capture the effect would be to propose that, under negation, French can insert implicit epistemic modals (like those needed in (39)) more easily that Italian.

> b. ??Non   ho   un qualche fratello.
>   I don't have A SOME   brother

> c. ??Non ho   sposato una qualche ragazza.
>   I haven't married A   SOME   girl

However, in (20), we have seen other DE-environments which are compatible with situations of partial knowledge and thus license *un qualche*: the antecedent of a conditional, the restriction of *every*, an optative operator, questions. We conclude that these environments do not just allow $qualche_{pl}$, but actually disfavor $qualche_{num}$.

One interesting result of this situation is that when the structure [NEG… *qualche*] is embedded under an environment which licenses $qualche_{pl}$, the indefinite can easily take scope *under* the negation (a fact noted for *some* in Farkas 2003:54, who cites Szabolcsi 2004; see also Baker 1978). The following examples all favor a narrow scope existential:[24]

> (44)   a. Se non trovi   qualche soluzione, sarai   nei guai.
>   if not you_find SOME   solution, you_will_be in trouble
>   "If you don't find some solution or other, you'll be in trouble"

> b. Ogni bambino che non ha   qualche foglio per scrivere
>   every child   who not has SOME   sheet to   write on
>   verrà   sgridato.
>   will_be scolded
>   "Any child who doesn't have some sheet to write on will be scolded"

> c. Non conosci   qualche giocatore?
>   not you_know SOME   player?
>   "Don't you know some player or other?"

> d. Magari non conoscesse   qualche giocatore d'azzardo,
>   If_only not he_would_know some   gambler,
>   quel ragazzaccio!
>   that rascal boy!
>   "If only he didn't know some gambler, that rascal boy"

This fact is a problem for other theories (see e.g. Farkas 2003), but it follows directly from the present analysis: thanks to the implicit epistemic modal introduced by the external operators, $qualche_{pl}$ is allowed with scope above or below negation.

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[24]Intermediate scopes are also possible. In (i) the preferred scope is if $> \exists > $Neg (Samek-Lodovici, p.c.).

> ((i))   Se non avessi risposto a (una) qualche domanda, dimmelo.
>   If not I_had answered (a) SOME question, let me know
>   "If there are questions that I have not completed, let me know"

Inserting *qualche_num* and scoping it outside negation like in (41) would not help here, since the operator would remain in a DE-environment.

    The next question is whether *qualche* is ever able to take widest scope across islands, as some indefinites are well known to do (the so-called "free scope"). In general, the answer is no: in (45) *qualche* can only take narrow scope, unlike the simple indefinite article and (interestingly) English *some*, as shown in (46).

(45)   a. Se vedi   (un) qualche poliziotto che ci conosce, fammi
             if you_see (A) SOME   cop   that us knows, give me
             un cenno.   *∃ >*if*
             a   sign.
             "If you see some cop who knows us, give me a sign"

        b. Ogni uomo che conosce (una) qualche persona che amo
            every man who knows   (A) SOME   person I love
            è fortunato   *∃ > ∀
            is lucky

(46)   If I meet again some guy I just had a fight with, I'll kill him. *OK* ∃ >if

Sentences with three potential scopes, like (47) (adapted from Farkas 2003) and (48), confirm and refine the same pattern. All the speakers I have asked reject the widest scope of *qualche*, and most accept the narrow scope as the most natural (particularly in the absence of *un*). Some speakers also accept an intermediate scope. I will return to this possibility in a moment.

(47)   Ogni collezionista ha deciso di comprare ogni album
            every collector   has decided to buy   every album
            pubblicato da (un) qualche fotografo   ungherese.
            published by (A) SOME   photographer Hungarian.
            "Every collector decided to buy every album published by some Hungarian photographer."

(48)   Ogni professore$_i$ sarà felice   se (un) qualche suo$_i$ studente
            every professor   will rejoice if (A) SOME   his student
            imbroglia agli   esami.
            cheats   in_the exams.
            "Every professor will rejoice if some or other of his students cheats in the exam"

    To see the reason for the impossibility of wide scope, we need to examine the two meanings for *qualche* separately. If *qualche* is *qualche_num*, the fact that it cannot scope out is, if not clear, unsurprising: no vague or complex numerals in Italian or English can take free scope, with the notable exception of English *some*: *many*,

few, *several*, *one or more*, *more than three*, *exactly four*, etc, are all island-bound. I will not deal with the nature of this constraint here, but see Zamparelli 2000, Section 6.3, and Winter 2001, Section 4.3 for discussion.

The exact reason why *qualche*$_{pl}$ and *un qualche*$_{pl}$ cannot take free scope depends on the origin of this possibility for other indefinites (*a, some*, simple numerals). In the "singleton property" approach, proposed in Schwarzschild (2002) and similar in many respects to Kratzer (1998), indefinites introduce existential quantifiers whose structural scope positions are not different from those of *every* or *most*; the impression of wide scope comes from the restrictions, which in a suitable context may end up applying to a single individual. In this case, the structural position of the quantifier becomes irrelevant. For instance, if in the context [[building in Washington]] = {**w**}, (49a) becomes equivalent to (49b).

(49)   If *some building in Washington* is attacked by terrorists, US security will be in danger.

    a. $[\exists x\ [\textbf{building\_n\_Washington}'(x) \cap \textbf{attacked}'(x)] \rightarrow \textbf{danger}(\textbf{security})]$
    $\equiv$

    b. $\exists x\ [\textbf{building\_n\_Washington}'(x) \cap [\textbf{attacked}'(x) \rightarrow \textbf{danger}(\textbf{security})]]$
    wide scope

This account heavily relies on the idea that overt restrictions may be further constrained by context-dependent domain properties. If *qualche*$_{pl}$ blocks these additional restrictions, we immediately derive the inability of *qualche*$_{pl}$ to become a singleton and take (apparent) free scope.

Suppose on the other hand that free scope is obtained by means of "choice functions" (Reinhart 1997, Winter 1997, etc.). Now a representation of the widest scope of (45a) would be something like:

(50) $\exists f$ se [OP tu vedi f(un qualche poliziotto che ci conosce)], fammi un cenno.   *cf. (45)*

The effect of the function f is that of picking a single individual. In a Hamblin semantics, this means that a single proposition will be formed and combined with the modal operator (OP). But now the effect of *qualche* on the restriction is wasted, again against the idea that domain widening must be done for a purpose.

Some speakers accept intermediate scopes for (47) (in (a): "for every collector, there is some (possibly different) Hungarian photographer whose albums that collector decided to buy"). To obtain this reading, we need to distinguish between implicit contextual restrictions (the domain property), which are blocked by *qualche*, and bound variables which may be implicit in the restriction. For instance, by saying (51) I do not mean that I am looking for anybody who is generally "a friend" of someone else, but that I am looking for just any old friend *of mine*.

(51) Sto cercando un qualche amico.
      I am looking for A SOME friend.

I suggest that the intermediate scope reading could result from an implicit relation containing a bound variable (e.g. "collected by *x*") associated with *fotografo* and bound by *ogni collezionista*.

5. SOME DIFFERENCES BETWEEN "QUALCHE" AND "SOME"

So far, following standard dictionary translations, I have glossed *(un) qualche* as (small caps) (A) SOME, avoiding the issue of whether and to what extent Italian *qualche* corresponds to the English *some* in meaning and distribution. It is now time to address this question directly.

One obvious difference between *qualche* and *some* is that *some* can be syntactically singular or plural. *Some*+N_{plur} is always semantically plural, *some*+N_{sing} always singular. The epistemic free-choice *un qualche*$_{pl}$ has been translated as *some*+N_{sing} or *some* N_{sing} *or other*, while *qualche*$_{num}$ was translated as *some*+N_{plur} or *a few*+N_{plur} (I disregard here the difference between *some* and *a few*). The formula *some . . . or other* is indeed acceptable in all those cases which allow a singular *(un) qualche* (see e.g. (19)—(23)).

Let me sketch an explanation for this division of labor between *some*+N_{sing} and *some*+N_{plur}. Suppose that the logical value of the two forms is the same, i.e. $\lambda Q[[[N]] \cap Q \neq \emptyset]$. Suppose, moreover, that singular *some* is generated in PlP, with the same domain-widening capabilities as *qualche*. Plural *some*, on the other hand, is generated in NumP, if not higher, given the contrast:

(52) a. He took some two kilos of sand.   = "*approximately two kilos. . .*"

      b. *He took some one kilo of sand.   = "*approximately one kilo. . .*"

I will assume that singular *some*, just like *qualche*, can be interpreted at Num. However, due to their formal similarity, the two *some* in Num compete in a Horn scale.

As a result, the existence of *some*+N_{sing} blocks the possibility for *some*+N_{plur} to be used with a singular meaning, and vice versa. *Some*+N_{sing} cannot take the pragmatic meaning of a simple singular indefinite, since it is blocked by the indefinite article *a*, but the epistemic free-choice meaning (the singular domain-widening meaning of *un qualche*$_{pl}$) remains available.

However, *some* diverges from *(un) qualche/algun* in allowing free scope, as we saw above in (46), and in having three additional possible meanings which are not shared by *(un) qualche* or *algun*.

The first is what Farkas (2003) calls the 'derogatory meaning' of *some*: the speaker may know the identity of the indefinite, but he or she implies, by using *some*, that this identity is actually irrelevant or uninteresting for the hearer. *Some* can in fact be used to convey that the speaker is withholding information which

could in principle allow the hearer to identify the object to which the restriction applies (perhaps because this information is inappropriate, or to be given later, etc.). This meaning (let's call it the "irrelevant identity" reading) is perfectly compatible with the range of extensional contexts which block *un qualche*, like those in (13), but is blocked by the presence of the modifier *...or other*. It is also very close to *a certain*.

(53)   a. I just married some girl (#or other).

        b. I have some brother (#or other).

        c. I know some guy (#or other) who could help you out of this problem.

A second meaning, discussed in Alonso-Ovalle and Menéndez-Benito (2003), is found in examples such as:

(54)   a. (*Context: at a university party a person of which all I know is that he is a professor starts dancing on the table*)
            Look! Some professor is dancing lambada on his table!   *(Alonso-Ovalle and Menéndez-Benito, 2003), ex.9*

        b. As you have seen, when we entered the university I was hugged and kissed by some student. Well, I have no idea who she was!

Qualche, *un qualche*, *algun* or *irgendein* could never be used in the equivalent of these sentence. What is peculiar about these cases is that both speaker and hearer have perceptually identified the individual at issue. What they lack is any further information about his or her identity. Let's call this meaning the "unknown identity" reading.

The third meaning available to *some* and unavailable to *(un) qualche* is the "evaluative property" reading, which may be modified by *quite* and can appear as a predicate.

(55)   a. Sam is (quite) some stud.

        b. They are (quite) some scientists.

Here *some* seems to offer a comment on the extent of someone's studness or scientific prowess. I believe this reading is genuinely different from the others, and I will not discuss it here any further.

The existence of the "irrelevant" and "unknown identity" readings for *some* but not for *un qualche* and other indefinite determiners raises interesting questions. Determiners are functional categories, and as for other functional categories, linguists have tried to factor their cross-linguistic differences in terms of the smallest possible number of features, to be learned by the child acquiring the language.

In the simplest possible linguistic world, we could expect determiners to be cross-linguistically composed of similar features, perhaps those features which form natural classes together. This would justify saying that two languages have 'the same' determiners.

Now, to what extent are English *some* and Italian *un qualche* 'the same' determiner? In many respects, they certainly pattern alike. They behave the same in negative contexts: like *qualche*, *some* takes scope outside a clause-mate *not* (see (56)) unless when embedded within a downward-entailing operator with an epistemic modal character (the reader can verify with the translations of (44)).

(56)   Mary did not buy some apartment in San Francisco when she could have afforded it and now it's too late.   *(Farkas, 2003)*

Moreover, they are identical in their behavior with copular sentences. Unlike numerals, *qualche* and *some* are not cumulative and cannot appear with group predicates like *be a team/group*.

(57)   a. Two persone sono già   una squadra.
             2   people are   already a   team

         b. ?? Qualche persona è un gruppo/una squadra/una pluralità.
             SOME   person is a   group/a   team/a   plurality
             cf. *"Some people are a group/a team/a plurality"

Last, neither *some* nor *qualche* can be bound by adverbs of quantification, unlike the indefinite article:

(58)   {*Qualche / uno} svedese è sempre alto.
         {SOME   / a}   Swede is always tall
         cf. *"Some Swede(s) is/are always tall"

Yet, as we have seen, there are meanings which are restricted to one of these forms and not the other. Any approach which tried to construct a unified semantic theory for all the meanings of *some* would be inadequate for *qualche*.

Which are the features, then, that distinguish *some* from *qualche*? All I can offer at present is some speculative remarks. The key to understand the two forms is the way we identify an entity. "Identifying" does not mean having a single hard and fast property which uniquely applies to an entity, but rather increasing the number of properties which we can use as alternative ways to pick that entity. Consider for instance (59). B is not an adequate response to A, even though it uniquely identifies an individual; B′ is. However, (59 B) can be an acceptable answer to (60 A), since it does add useful additional information.

(59)   A: Who are you?

B: The person you are speaking to right now.

B′: Roberto Zamparelli.

(60)   A: Who is Roberto Zamparelli?

B: The person you are speaking to right now.

Let's go back to the most problematic case, singular *some* in e.g. (54 a):

((54a)) Look! Some professor is dancing lambada on his table!

Suppose that *some* has the same choice of positions as *qualche*, and that in this particular case it is interpreted in *Num*, since there is no modal to license the PlP interpretation. Unlike *qualche*, *some*+N_{sing} cannot be semantically plural, for it is blocked by *some*+N_{plur}; since it is interpreted above the position where the final restriction is computed, it quantifies over the whole final restriction. This is as it should be: the meaning we want is strongly contextualized: *professor* seems to mean *professor we are looking at in this very moment*. This can be modeled by saying that in every world w compatible with my beliefs the property P of being the special dancing professor before my eyes is uniquely satisfied by an individual, say **k**. I suggest that in this context the role of singular *some*+PlP can be characterized as in (61):

(61)   There is no property Q such that

a. $Q^{w,g} = [[\text{PlP}]]^{w,g}$ for all variable assignments g and worlds w compatible with the beliefs of the speaker s, and

b. $Q^{w',g} \cap [[\text{PlP}]]^{w',g} = \emptyset$ in some other possible world w' accessible by s.

In words, if I am the speaker I have in my beliefs no additional property distinct from the final restriction by which the individual(s) picked up by the final restriction could be uniquely identified. Part (b) of the definition makes sure that we are considering only additional properties that are truly distinct from the restriction, and not just in an entailment relation with it. The use I have called the "irrelevant identity" reading would be the same, except this time the speaker simply believes that it is the hearer who has no additional identifying property for the description the speaker is providing.

For illustration, suppose I know that Robert Louis Stevenson is the author of *Treasure Island*. Thus, in all the worlds which represent my beliefs it holds:

(62) $\iota[[\text{guy that wrote } \textit{Treasure Island}]] = \mathbf{s}$

I could use *some* in the meaning under discussion, as in *The prof told us to read an essay by some guy that wrote "Treasure Island"*, only if I didn't have in my beliefs (or thought that my hearer doesn't have in his/her beliefs) that, for instance:

(63)   a. ι[[guy that wrote *The bottle imp*]] = **s**

        b. ι[[guy that wrote *The Strange Case of Dr. Jekyll and Mr. Hyde*]] = **s**

        c. ...

Evidently, the notion of "additional identifying property" needs refinement: there are probably many additional outlandish properties which do not count for the purpose of using *some*. Perhaps the additional identification should in turn be constrained by context.

Since in this use of *some* the final restriction can be as narrow as a single individual, we expect that this meaning of *some* should have the possibility of free scope, much as the simple indefinite in (49) above (see Schwarzschild 2002).[25] However, *some* still cannot be used with entities which are hard to identify in multiple ways. A prime example is that of numbers and measuring units:

(64)   a. *[some kilo]   *cf. 25*

        b. *[some number two]   *cf. "a certain number (*two)"*

It is possible that the "unknown identity" meaning of *some* is not be completely excluded for *qualche*$_{pl}$, at least for some readers. In cases like (65), a scope outside the restriction of *ogni* "every" seems much easier to obtain.

(65)   Ho sentito dire che ogni collezionista ha   deciso   di comprare
        I   heard   that every collector   has decided to buy

        ogni album di un qualche fotografo   ungherese,
        every album by A SOME   photographer Hungarian,

        il cui nome   al momento mi sfugge.
        whose name at present   eludes me.

        "I heard that every collector decided to buy every album published by some famous Hungarian photographer, whose name at present eludes me."

Again, this meaning of *un qualche* is very close to the meaning of *un certo*, the difference being that with *qualche* the speaker is not expected to be able to provide further identification. I will leave a more precise analysis of the differences between these "specific" meanings of *some* and *qualche* unexplored for the time being.

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[25] In a choice-functional account, the possibility of wide scope would be given by the fact that this use of *some* is not vague and it is not domain widening, the two factors which played a role in limiting the scope of *qualche*.

6. "QUALCHE" AND "QUALSIASI"

Chierchia (2006) has proposed a scale-based analysis for another singular determiner, *qualsiasi* 'any$_{fc}$' which seems very similar to the present analysis for *qualche*, since *qualsiasi* is treated as a domain-widener over the denotation of N/NP. Both analyses make very minimal additional assumptions on the semantics of these forms, putting the burden on the pragmatic effect of widening combined with a simple existential quantification. The problem is that native speakers of Italian have the clear intuition that (66 a) and (66 b) differ in meaning.[26]

(66)   a. Sto cercando   un qualche dottore.
            I am looking for A SOME   doctor

        b. Sto cercando un qualsiasi dottore.
            I am looking for A ANY doctor
            "I am looking for a doctor whatsoever"

One could thus suspect that one of the two analyses must be incorrect, or at least very incomplete.

This conclusion would be too rushed, I think. *Qualche* and *qualsiasi* can both be analyzed as elements that widen the domain of the restrictor (a direction of analysis confirmed by the fact that DPs containing *qualsiasi* and *qualche$_{pl}$* have very similar distributions), if we acknowledge the fact that a restriction can be widened in two different ways. *Qualche* prevents contextually salient properties from intersecting with the NP denotation, whatever it may be. *Qualsiasi*, on the other hand, stretches the denotation of N itself. According to Chierchia, *qualsiasi*+N (and *any*+N) 'widens' the denotation of its N argument by selecting the widest possible domain of quantification (within a range of reasonable candidates). For our purposes, this is the domain where the denotation of N is a superset of the denotation of N in any other domain; this operation maximizes the number of objects which count as instances of N: 'marginal cases' are now included. For instance, *qualsiasi dottore* 'any doctor' might enroll among possible relevant doctors even chiropractors or voodoo healers.

The effect of *qualche* is much less radical: it simply makes sure that even if a particular doctor or kind of doctor happens to be salient, *qualche$_{pl}$ dottore* will still range on the full denotation for *dottore*, and not over, say, 'doctors of the kind salient in this moment'. Put otherwise, *qualche dottore* affects the answer to the question: "which doctor?", *qualsiasi dottore*, the answer to the question "what kind of doctor", and only derivatively "which doctor". In practice, the effect of *qualsiasi* subsumes that of *qualche*: if the speaker has used *qualsiasi* to decrease the information on the nature of N, the hearer can infer that no contextually implicit property

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[26]I am actually extrapolating, since Chierchia acknowledges the existence of the order *un qualsiasi N*, but does not actually provide a full analysis for it.

(of the sort filtered out by *qualche*) should be understood to restrict N. It would make little sense to widen N and then let the context restrict it again.

The idea that *qualsiasi* directly affects the denotation of N can explain a very low position within DP, immediately after the noun (see Crisma 1991, Cinque 1994), a region of the DP which has been associated with a kind or intensional property denotation (see e.g. Krifka 1995, Zamparelli 2000). This position is completely precluded to *qualche*:[27]

(67) a. qualsiasi/qualche dottore

       b. un (qualsiasi/qualche) dottore

       c. un dottore (qualsiasi/*qualche)

If we map *qualche* onto *whichever* and *qualsiasi* onto *whatever/whatsoever* we obtain a parallel effect:

(68) a. whatever/whichever person

       b. no person whatever/whatsoever/*whichever

A second difference between *qualche* and *qualsiasi* is that the latter never seems to lose the 'free choice' meaning: no instance of *qualsiasi* can appear outside a modalized context, unlike $qualche_{num}$. This seems to indicate that *qualsiasi* is for some reasons always interpreted in its base position, or al least, within NP. Unfortunately, I have to leave a closer comparison between *qualche* and *qualsiasi* to another occasion.

7. IS "QUALCHE" A QUANTIFIER?

The last question I want to address is whether the existential meaning I have associated with *qualche*, in (26), is part of its lexical semantic specifications. If this was the case, *qualche* would be inherently diadic, with an internal argument (the nominal restrictor), and an external one (the main predicate). Any well-formed instance of *qualche*+N in a position reserved for properties (e.g. a predicate nominal) would require a special type-shifting from $\langle\langle et\rangle t\rangle$ to $\langle et\rangle$ (à-la Partee 1987). The alternative is for *qualche* to be an indefinite, a property modifier which is quantificationally closed only by external means (e.g. some version of existential closure). In this

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[27] It should be noted that in the post-N position *qualsiasi* has a second meaning as well, which can be rendered as *average* or *non-descriptive*. This reading is favoured in cases such as (i).

((i))   Sto   cercando   un uomo qualsiasi, non un Einstein o un Bill Gates.
         I am looking for a   man   average, not an Einstein or a   Bill Gates.
         "I am looking for an average man, not an Einstein or a Bill Gates".

case, *qualche*+N would natively denote a property and we could expect it to fit in small clauses and copular constructions without any need for type-shifting.

At a first look, the data seems to support the position that *qualche* is a 'native' quantifier. Like *ogni* 'every', it cannot appear as a predicate in cases such as:

(69)   a.   *Quella persona è qualche ragazzo italiano.
             That   person   is SOME   Italian   boy

           b.   *I   partecipanti sono qualche ragazzo italiano.
              The   participants are   SOME   Italian   boy

(70)   a.   *{Gianni / Nessun ragazzo / Ogni ragazzo} qui   presente è
             {Gianni / no   boy   / every boy}   here present is
             qualche studioso.
             SOME   scholar.

           b.   *{Gianni / Nessun ragazzo / Ogni ragazzo} qui   presente è un
             {Gianni / no   boy   / every boy}   here present is (A)
             qualche studioso.
             SOME   scholar.

(71)   *Io considero Gianni (un) qualche grande studioso.
            I   consider   Gianni (A) SOME   great   scholar

Next, *qualche*, unlike *un* and like *ogni* cannot be bound by adverbs of quantification.

(72)   {*Qualche / *Ogni / Uno} svedese è   sempre alto.
            {SOME   / every / a}   Swede   is always   tall
            cf. *"Some Swedes(s) is/are always tall"

If *qualche* was a quantifier, its inability to escape syntactic islands could be quite conveniently reduced to the fact that *every* and other quantifiers are island-bound. The only case where *qualche* could escape islands was in combination with *un*, in (65), and there we could somehow attribute the effect to the indefinite article.

However, the evidence for this simple analysis remains inconclusive. The correct behavior of *qualche* in (69)–(72) could be derived only if this word was *obligatorily* analyzed as a quantifier. But (65) already shows that, in its position after the indefinite article, *qualche* must behave as a monoargumental modifier, hence an indefinite; it is not clear why this meaning should not be available also in the absence of *un*.

Additional data show that *qualche*+N does not always behave like *every* or *each*. A first important difference is that *qualche* can appear in those existential sentences where 'strong' (= 'quantificational', in some accounts) determiners, definite article included, would be deviant:

(73)   Esiste   {una / qualche / ??la   / *ogni / *ciascuna}
        there_exists {a   / SOME   / the   / every / each}
        soluzione   a   questo   problema.
        solution   to   this   problem.

Second, *qualche* does not trigger the presuppositions of existence associated with quantifiers like *every*, *most* or *the*: (74) does not imply the existence of any mistake.

(74)   Se trovi   qualche errore,   fammi sapere.
        if you find SOME   mistake, let me know.

Third, as we saw in (18), repeated below, *qualche* can be the antecedent of a singular pronoun in donkey-anaphora:

((18)) Se ho   qualche spicciolo in   tasca,   te   lo metto
        If I_have [SOME coin]$_i$ in the pocket, (I) CL **it**$_i$ put

        sul   cruscotto.
        on the dashboard

        "If I have coins in the pocket, I will put them on the dashboard"

Fourth, in Italian the quantifiers *ogni* "every" and *ciascuno* "each" followed by a simple NPs cannot appear in the clitic left-dislocated position (75a, b). However, *qualche* is perfect in the same position, with the typical plural interpretation.

(75)   a. ?? {Ogni / Ciascun} amico$_i$,   l'$_i$ ho   chiamato ieri.
              {every / each}   friend$_i$, (I) him$_i$ have called   yesterday.
              "Every/Each friend, I called yesterday"
        b. Qualche amico$_i$,   l'$_i$ ho   chiamato ieri.
           some   friend$_i$, (I) him$_i$ have called   yesterday.
           "Some friends, I called yesterday"

This might perhaps follow from the binding behavior in (18), if one assumed that in the dislocated position a quantified nominal cannot C-command the clitic pronoun.

As for the predicative examples in (69)–(71), their unacceptability could be due to a combination of factors which do not hinge on *qualche* being a quantifier. In (69a) and (70a) there is a mismatch between the singular subject and the semantically plural predicate. (69b) shows that the mismatch cannot be solved simply by having a syntactically plural subject: plural subjects with singular predicates are possible in English or Italian, but only if the predicate can be understood cumulatively, as in e.g. *Those boys are a problem*. But (57b) above has already shown that *qualche* + N cannot be interpreted cumulatively (i.e. *qualche*$_{num}$ + N cannot be coindexed with a group noun). If on the other hand the predication is read distributively, the predicate must agree with the subject (so we have *Those boys are*

*actors/*an actor*). This is of course not what happens in (69b), hence its ungrammaticality. If however the subject is plural and *qualche_num* is embedded in a conjunction, (76), the predicate nominal becomes perfect.

(76)   I   partecipanti sono quattro o cinque matricole e   qualche
        the   participants are 4   or 5   freshmen and SOME
        studente del   secondo anno
        student   from second   year
        "The participants are some four or five freshmen and some second
        year students"

The singular predicative reading (cf. b) can be saved using a modal context which licenses *qualche$_{pl}$*:

(77)   Quella   macchia sul   radar potrebbe essere qualche veicolo da
        that   spot   on_the radar could   be   SOME vehicle to
        intercettare.
        intercept.
        "That spot on the radar could be some vehicle to intercept"

The impossibility of binding by adverbs, shown in (58) above could again be due to a contrast between the pragmatic effects of this type of quantification and the semantics of *qualche*. In general, vague numerals are not easily bound by adverbs or generics, see (78); *some/qualche$_{num}$* could be worse simply because its number if even less specified.

(78)   Many Italians always make a lot of noise.   *? in the meaning:* "*Italians
        always make noise, when in large numbers*"

As for the domain-widening *qualche$_{pl}$*, its contribution would be redundant, since adverbs of quantification already range on the total denotation of the nominal restrictions (so, even if there are speaker-salient Swedes, *a Swede is always tall* in (58) remains a statement about Swedes *in general*). This is an essential part of the pragmatic effect of this class of generic expressions, which is, very roughly, that of establishing law-like regularities (see Carlson 1977).

What these data tell us is that *qualche* is not parallel to *ogni/every*. There could be two explanations. Either *qualche* is lexically a quantifier, but existential quantifiers behave differently from universal ones despite their common logical type, or *qualche* is not (or not always) a lexical existential quantifier, and its logical meaning comes from some non-lexical operation of existential closure. The first hypothesis is of course difficult to test, since we no longer have at this point any clear case of *lexical* existential quantifier to test it against. Until sharper tests are developed, the matter must remain open.

8. CONCLUSIONS

The analysis presented in this paper has largely been an exercise in (and hopefully, an exploration of) the syntax–pragmatics interface. I have proposed that the complex behavior of the Italian determiner *qualche* and its variants follows from the two positions in which this expression can be interpreted, and from the interplay between a logical meaning (which may or may not be part of the lexical specification of the determiner itself) and a pragmatic meaning, computed by comparing *qualche* with the pragmatic meanings of other determiners in the same Horn scale. Morphological markedness plays a role in determining the position in the scale, and the final pragmatic meaning.

The singular, 'indeterminate' interpretation for *qualche* and *un qualche* has been attributed to a low LF position which 'bleeds' contextual restrictions, obtaining the so-called domain-widening effect. The fact that this meaning is available only in certain intensional contexts can provide an explanation for the complex behavior of *qualche* under negation. If the proposal is on the right track, specifying multiple *qualche* (or multiple meanings of *qualche*) in the lexicon becomes largely unnecessary.

One issue in need of further work is the difference between *qualche* and *some*. Despite many similarities, the latter seems to be open to a reading where the restriction is a property that singles out an entity known to the speaker, provided this entity cannot be identified by additional (salient?) properties. One interesting question is whether this difference could be cast purely in terms of intensionality (*some* would be sensitive to intensional properties in a way *qualche* or *algun* are not). A symmetrical proposal has in fact been advanced for the definite determiner by Dayal (2004) (the Italian definite article would be intensional, the English one would not). My hunch is that in the final picture intensionality is going to be an ingredient, but probably not the only one.

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