Impersonal pronouns and coreference:
the case of French *on*

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1. Introduction

The initial impetus for this study of the coreference properties of the French impersonal pronoun *on* was the hypothesis that the coreference properties of impersonal pronouns such as French *on* or German *man* should provide a straightforward criterion for distinguishing them from impersonal markers that do not originate from pronouns, like those occurring in unspecified subject constructions of the type found for example in Polish, in Finnic languages, or in Celtic languages, and for describing the possible conversion of impersonal pronouns into impersonal markers.[1] However, the data I was able to gather suggested that things are much more complex than I imagined at first, and convinced me that more precise descriptions of the coreference properties of various types of unspecified and/or implicit subjects in individual languages are necessary before trying to put forward any generalization.

The account of the coreference properties of *on* proposed in this paper builds on work by Kœnig 1999 and Kœnig & Mauner 1999, who within the framework of Discourse Representation Theory argue that *on* does not introduce a 'discourse marker', and therefore is not available for certain types of anaphoric reference which are possible with indefinite pronouns truth-conditionally equivalent to *on*. But their analysis concentrates on the 'existential' uses of *on*, and on certain aspects of its referential behavior. The aim of this paper is to provide a more detailed account of the coreference properties of *on* in its various uses.

The paper is organized as follows. In section 2, I examine the morphosyntactic, semantic and discursive properties of *on* that remain constant in all its uses. Section 3 is devoted to the distinction between 1st person plural *on* and all the other uses of *on*, subsumed under the term 'impersonal *on*'. Sections 4 & 5 examine two particular varieties of *on* that sharply differ in their coreference properties, 'existential *on*' and 'gnomic *on*'. Section 6 discusses

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[1] On impersonal pronouns, see Chierchia 1995, Zifonun 2000 Egerland 2003, Prince 2003, D'Alessandro & Alexiadou 2003 & 2006, Moltmann 2006, Prince 2006, Cabredo Hofherr To appear, and from a historical point of view Jónsson 1992, Welton-Lair 1999, Egerland 2006, Giacalone & Sansò 2007a & 2007b. On impersonal uses of personal pronouns, see Kitagawa & Lehrer 1990. On 'arbitrary null pronominals', see Cinque 1988, Condoravdi 1989, Casielles Suárez 1996, Alonso-Ovalle 2000, Cabredo Hofherr 2003, Bhatt & Pancheva 2004. On similar constructions using various types of morphological marking (reflexive marking, passive marking, or dedicated impersonal marking), see among others Chierchia 1995, Dobrovie-Sorin 1998, Blevins 2003, and on individual languages Noonan 1994 & 2001 (Irish), Hewitt 2001 (Breton), Kibort 2003 (Polish), Słoń 2003 (Polish), Manninen & Nelson 2004 (Finnish), Kaiser & Vihman 2006 (Finnish & Estonian), D'Alessandro 2007 (Italian).

the division of the uses of impersonal *on* into those characterized by discourse inertness and those characterized by discourse availability. Section 7 puts forward some conclusions.

2. General properties of *on*

2.1. The origin of *on*

Historically, *on* comes from Latin *homo* 'human being', and is therefore cognate with the noun *homme* 'man'. *On* grammaticalized very early in the history of French from the 'cas sujet' (reflex of the Latin nominative form *homo*) of this noun, whose 'cas regime' (reflex of the Latin accusative form *homine(m)*) quite regularly gave the noun *homme*. It is commonly assumed that Germanic influence was decisive, but Giacalone & Sansò 2007a & 2007b show that the initial stage of this process can be traced back to Latin.

2.2. The morphosyntactic nature of *on*

Morphosyntactically, regardless of the variations that may affect its interpretation, *on* unquestionably belongs to a paradigm of subject pronominal clitics including also *je* (1sg), *tu* (2sg), *il* (3sgm), *elle* (3sgf), *nous* (1pl), *vous* (2pl), *ils* (3plm), and *elles* (3plf), as well as a clitic variant of the neuter demonstrative *cela ~ ça* 'that'.[2] Like other subject pronominal clitics, *on* normally occurs to the left of the verb, in a position apparently similar to that of subject NPs, but in certain conditions, for example in the interrogative construction illustrated by ex. (1), subject pronominal clitics (including *on*) immediately follow the verb (or the auxiliary, in analytical tenses), in a position in which NPs and non-clitic pronouns cannot occur.[3]

(1)   a. *Comment   as-tu   réussi   à ouvrir   cette   porte ?*
         How   have.PRS.2SG-2SG manage.PTCP to open.INF DEM.SGF door.SG
         'How did you manage to open this door?'

      b. *Comment   a-t-il   réussi   à ouvrir   cette   porte ?*
         How   have.PRS.3SG-3SGM manage.PTCP to open.INF DEM.SGF door.SG
         'How did he manage to open this door?'

      c. *Comment   a-t-on   réussi   à ouvrir   cette   porte ?*
         How   have.PRS.3SG-*ON* manage.PTCP to open.INF DEM.SGF door.SG
         'How did they$_{arb}$ manage to open this door?'

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[2] In this respect, French *on* is very different from Italian impersonal *si*, sometimes analyzed as a subject clitic similar to French *on*: on the one hand, Standard Italian has no clitic variant of the personal pronouns in subject role with which impersonal *si* could be compared directly, and on the other hand, the position of accusative or dative clitics *before* impersonal *si* is at odds with what is observed in the preverbal clitic clusters of other Romance varieties.

[3] Some of the examples used in this paper have been constructed, others have been taken from French grammars and dictionaries or observed in conversations, broadcasting, newspapers, etc., but all of them have been discussed with other native speakers of French, and I have retained only those for which my consultants and I agreed on relatively clear-cut acceptability judgments.

d. **Comment a Jean réussi à ouvrir cette porte ?*
   How   have.PRS.3SG Jean manage.PTCP to open.INF DEM.SGF door.SG
Intended: 'How did Jean manage to open this door?'
(OK: *Comment Jean a-t-il réussi à ouvrir cette porte ?*)

Another piece of evidence that *on* belongs to the paradigm of subject pronominal clitics is that, like the other subject clitics, *on* in preverbal position can be separated from the verb by the accusative or dative pronominal clitics, the reflexive clitic *se*, the locative clitic *y*, the ablative clitic *en*, and the negative marker *ne* – ex. (2), but does not permit the insertion of any other form, unlike subject NPs and non-clitic pronouns in subject role, which can for example be separated from the verb by parenthetical clauses – ex. (3).

(2)   a. *Je ne lui en parlerai pas.*
         1SG   NEG   3SG.DAT   ABL   speak.FUT.1SG   NEG
         'I will not mention it to him.'

      b. *On ne lui en parlera pas.*
         ON   NEG   3SG.DAT   ABL   speak.FUT.1SG   NEG
         'It will not be mentioned to him.'

(3)   a. *Marie, je l' ai remarqué,*
         Mary   1SG   3SGM.ACC   have.PRS.1SG   notice.PTCP
         n' aime pas être contredite.
         NEG   like.PRS.3SG   NEG   be.INF   contradict.PTCP.SGF
         'Mary, as I noticed, does not like to be contradicted.'

      b. **Tu, je l' ai remarqué,*
         2SG   1SG   3SGM.ACC   have.PRS.1SG   notice.PTCP
         n' aimes pas être contredit.
         NEG   like.PRS.2SG   NEG   be.INF   contradict.PTCP.SGM
         Intended: 'You, as I noticed, do not like to be contradicted.'
         (OK : *Toi, je l'ai remarqué, tu n'aimes pas être contredit* – *toi* is the independent 2nd person pronoun)

      c. **On, je l' ai remarqué,*
         ON   1SG   3SGM.ACC   have.PRS.1SG   notice.PTCP
         n' aime pas être contredit.
         NEG   like.PRS.3SG   NEG   be.INF   contradict.PTCP.SGM
         Intended: 'People, as I noticed, do not like to be contradicted.'
         (OK : *Les gens, je l'ai remarqué, n'aiment pas être contredits.* – *les gens* = 'people')

Verbs hosting *on* in the subject clitic slot invariably show 3rd person singular agreement, not only in the 'existential' use of *on* illustrated by ex. (4), but also in all of its other possible uses.

(4) a. *J'   ai   réussi   à ouvrir   cette   porte.*
      1SG   have.PRS.1SG manage.PTCP to open.INF   DEM.SGF   door.SG
      'I managed to open this door.'

    b. *Tu   as   réussi   à ouvrir   cette   porte.*
       2SG   have.PRS.2SG manage.PTCP to open.INF   DEM.SGF   door.SG
       'You(sg) managed to open this door.'

    c. *Jean / Il / On   a   réussi   à ouvrir   cette   porte.*
      Jean / 3SGM / ON have.PRS.3SG manage.PTCP to open.INF   DEM.SGF   door.SG
      'Jean / He / Someone managed to open this door.'

2.3. *On*, verbal valency, and the [+human] feature

With the only exception of 1st person plural **on** (see section 3.2), clauses in which **on** occupies the subject clitic slot cannot include a topicalized NP representing the subject argument, and the presence of an adjunct representing the subject argument (like the "agent phrase" in passive constructions) is also excluded. But in spite of that, a general property of **on** is that its presence in the clitic subject slot never implies a modification in the valency of the verb. Whatever the particular reading of **on** triggered or licensed by the context, the subject argument of a verb hosting **on** in the clitic subject slot remains semantically present, as proved by the possible presence of agent-oriented adverbials, and no modification is observed in the expression of the other arguments – ex. (5).

(5) a. *Jean a   ouvert   la   porte   soigneusement.*
      Jean have.PRS.1SG open.PTCP   DEF.SGF   door.SG   carefully
      'Jean opened the door carefully.'

    b. *On   a   ouvert   la   porte   soigneusement.*
       ON   have.PRS.1SG open.PTCP   DEF.SGF   door.SG   carefully
       'The door has been opened carefully.'

    c. * *On   a   ouvert   la   porte   par Jean.*
        ON   have.PRS.1SG open.PTCP   DEF.SGF   door.SG   by   John
      Intended: 'The door has been opened by John.'
      OK: *La porte a été ouverte par Jean.* (passive)

Another general property of **on** is that, whatever its precise value, it imposes the feature [+human] (or perhaps rather [+conscious]) on the subject argument of the verb.

2.4. *On* and control

The variations in the possible interpretations of **on** do not affect the behavior of the subject argument in control constructions, in particular in constructions involving complement infinitives. As shown by ex. (6), in constructions involving the control of a complement

infinitive by the subject of the main verb, the subject argument of verbs hosting **on** in the subject clitic slot invariably behaves like canonical subjects.

(6)   a. *Jean t'   a   critiqué.*
         Jean   2SG.ACC   have.PRS.3SG criticize.PTCP.SGM
         'Jean criticized you'

      b. *Jean a   essayé de te   critiquer.*
         Jean have.PRS.3SG try.PTCP COMP 2SG.ACC   criticize.INF
         'Jean tried to criticize you.'

      c. *On   t'   a   critiqué.*
         ON   2SG.ACC   have.PRS.3SG criticize.PTCP.SGM
         'They$_{arb}$ criticized you' (= 'You were criticized')

      d. *On a   essayé de te   critiquer.*
         ON   have.PRS.3SG try.PTCP COMP 2SG.ACC   criticize.INF
         'They$_{arb}$ tried to criticize you.'

3. First person plural *on* and impersonal *on*

3.1. Preliminary remarks

In this analysis of the coreference properties of **on**, I will not assume an a priori classification of the uses of this pronominal clitic. Rather, I will try to show how the observation of the coreference properties of **on** can contribute to such a classification. However, the distinction between 1st person plural **on** and the other uses of **on** is so clearcut that it can conveniently be established before tackling the analysis of the other varieties of **on**, subsumed here under the label 'impersonal **on**'.

3.2. *On* as a 1st person plural pronoun

In Colloquial French, **on** has a fully grammaticalized use as 1st person plural subject clitic, in which it simply substitutes for the subject clitic **nous** of Standard French, but neither for **nous** as an accusative/dative clitic nor for **nous** as an independent pronoun, as illustrated by ex. (7).

(7)   a. *Nous aussi,   nous   y   étions ;*
         1PL   too   1PL   LOC   be.IMPF.1PL
         tu   ne   nous   as   pas vus ?
         2SG   NEG   1PL.ACC have.PRS.2SG NEG   see.PTCP.PLM
         'We too were there, didn't you see us? (Standard)

      b. *Nous aussi,   on   y   était ;*
         1PL   too   ON   LOC   be.IMPF.1PL

tu	*ne*	*nous*	*as*		*pas*	*vus ?*
2SG	NEG	1PL.ACC	have.PRS.2SG		NEG	see.PTCP.PLM

'We too were there, didn't you see us? (Colloquial)

c. **On aussi, on y était; tu n'on a pas vus ?*

Not surprisingly, the use of *on* as a 1st person plural subject clitic is not always easy to distinguish from 'universal' *on* on a purely semantic basis, but ex. (8) illustrates *on* unambiguously referring to a specific group of persons including the speaker.

(8)	*Avec*	*Jean,*	*on*	*ira*	*au*	*théâtre*	*ce*	*soir.*
	with	Jean	*ON*	go.FUT.3SG	to.DEF.SGM	theater.SG	DEM.SGM	evening.SG

'Jean and I will go to the theater tonight'

Morphosyntactically, like all other varieties of *on*, 1st person plural *on* combines with verbs in the 3rd person singular and triggers the choice of the 3rd person form of the reflexive clitic *se.* But in all other respects, it triggers the choice of unambiguous 1st person plural forms: the corresponding possessive is 1st person plural *notre*, and the corresponding form of the intensive pronoun is 1st person plural *nous-mêmes.* By contrast, in the other uses of *on* that allow the reflexive binding of possessives and the use of intensive pronouns, in the same way as with the implicit subject of uncontrolled infinitives, the possessive is 3rd person singular *son*, and the intensive pronoun is *soi-même*, the use of which tends to be restricted to unspecified subjects. Ex. (9) & (10) illustrate the contrast between 1st person plural on and gnomic *on* (which will be described in detail in section 5), and the similarities between the behavior of gnomic on and that of the implicit subject of uncontrolled infinitives.[4]

(9)	a.	*Nous*	*avons*	*envoyé*	*nos*	*enfants*	*à*	*la*	*campagne.*
		1PL	have.PRES.1PL	send.PTCP	POSS1PL.PL	child.PL	to	DEF.SGF	countryside.SG

'We have sent our children to the countryside' (Standard)

	b.	*On*	*a*	*envoyé*	*nos*	*enfants*	*à*	*la*	*campagne.*
		ON	have.PRES.3SG	send.PTCP	POSS1PL.PL	child.PL	to	DEF.SGF	countryside.SG

'We have sent our children to the countryside' (Colloquial)

	c.	*On*	*aime*	*ses*	*enfants.*
		ON	love.PRES.3SG	POSS3SG.PL	child.PL

'One loves one's children' (gnomic *on*)

	d.	*Il*	*est*	*normal*	*d'*	*aimer*	*ses*	*enfants.*
		3SGM	be.PRES.3SG	normal	COMP	love.INF	POSS3SG.PL	child.PL

'It is normal to love one's children.'

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[4] Note however that the presence of the 1st person plural possessive does not exclude possible ambiguities with other varieties of impersonal *on*. For example, another possible reading of sentence (8b) is 'They$_{arb}$ have sent our children to the countryside' (or 'Our children have been sent to the countryside').

(10) a. *Nous nous   défendrons   (nous-mêmes).*
         1PL   REFL.1PL defend.FUT.1PL   INT.1PL
         'We will defend ourselves.' (Standard)

      b. *On   se   défendra   (nous-mêmes).*
         ON   REFL.3 defend.FUT.3SG   INT.1PL
         'We will defend ourselves.' (Colloquial)

      c. *Quand c'   est   nécessaire, on   se   défend   soi-même.*
         when   DEM be.PRES.3SG necessary.SG ON   REFL.3 defend.PRES.3SG INT
         'When it is necessary, one defends oneself.' (gnomic *on*)

      d. *Se   défendre soi-même n'   est   pas   facile.*
         REFL.3 defend.INF   INT   NEG   be.PRES.3SG   NEG   easy.SG
         'To defend oneself is not an easy task.'

It is also interesting to observe (Patricia Cabredo Hofherr, p.c.) that 1st person plural *on* triggers 3rd person *singular* agreement of finite verb forms, but *plural* agreement of adjectives and participles.

3.3. Impersonal *on*

In the terminology used in this paper, 'impersonal *on*' refers to all the uses of *on* in which *on* does not substitute for the 1st person plural subject clitic *nous* of Standard French. At first sight, this terminological choice may seem to be at odds with the well-known fact that some occurrences of *on* may be truth-conditionally equivalent, not only to 1st person plural, but also to 1st person singular, second person, or 3rd person pronouns – see 6.1.2 & 6.2.3 for more details. But the intuition of French speakers, reflected in the comments of French grammars and dictionaries, is that such uses of *on* are 'stylistically' marked (i.e., they involve marked discourse strategies), in contrast with 1st person *on*, the use of which depends exclusively on speech register. In Colloquial French, 1st person plural *on* is absolutely neuter with respect to speech strategy. Crucially, this intuition is supported by a very simple and general criterion setting 1st person plural *on* apart from all other varieties of *on*, including those that can be paraphrased by personal pronouns other than 1st person plural: as illustrated by ex. (7b) above, 1st person plural *on* occupying the subject clitic slot can co-occur with the independent form of the 1st person plural pronoun in topic position, whereas in all of its other uses (including those spontaneously interpreted by French speakers as referring to speech act participants or to some specific individual present in the situation), *on* excludes the presence of a topicalized pronoun or NP referring to the subject argument.

In other words, 1st person plural *on* is the only variety of *on* that does not exclude *naming* the subject argument by means of a topicalized pronoun or NP. This justifies grouping all the other varieties of *on* under the label 'impersonal', in spite of the fact that they may occur in contexts in which there is no ambiguity over the identification of the subject argument.

4. Coreference properties of existential *on*

4.1. Existential *on*

It is well known that *on* referring to an unspecified subject can sometimes be truth-conditionally equivalent to *quelqu'un* 'someone' or *des gens* 'some people' ('existential *on*', as in ex. (11)).

(11) a. *On   frappe   à   la   porte.*
        ON   knock.PRS.3SG   at   DEF.SGF   door.SG
       'Someone is knocking at the door.'

    b. *On   a   retrouvé ton   porte-monnaie.*
        ON   have.PRS.3SG   find.PTCP   POSS2SG.SGM   purse.SG
       'Your purse has been found'

    c. *On   a   dormi   dans ce   lit.*
        ON   have.PRS.3SG   sleep.PTCP   in   DEM.SGM   bed.SG
       'This bed has been slept in.'

Cabredo Hofherr 2003 discusses cross-linguistic evidence supporting the distinction between several semantic sub-types of (quasi-)existential readings of unspecified subjects. On the basis of the definitions she provides, it is possible to recognize a *specific existential reading* of French *on* (temporally anchored, as in *On frappe à la porte*), a *vague existential reading* (only implying that an event of the type described has taken place, as in *On a retrouvé ton porte-monnaie*), and an *inferred existential reading* (characterized by inference of an event from its perceivable results, as in *On a dormi dans ce lit*). However, I have found no evidence that the coreference properties of *on* could be sensitive to these distinctions. The coreference properties of *on* do not even support the recognition of the equivalence with *quelqu'un* as a valid criterion for distinguishing a subtype of *on* clearly distinct from other subtypes. Sentences such as those of ex. (11) must therefore be viewed as a mere illustration of a possible discursive behavior of *on* which is particularly easy to establish in sentences in which the intuition of French speakers is that *on* and *quelqu'un* are synonymous.

    It is not difficult to show that there is no clear-cut boundary separating such sentences from other possible uses of *on*, the explanation being that the equivalence between *on* and *quelqu'un* puts into play several factors, including not only the tense-aspect-mood value of the verb form and the lexical meaning of the verb, but also contextual data.

    For example, the equivalence between *on* and *quelqu'un* 'someone' / *des gens* 'some people' suggested by sentences such as those of ex. (11) above, is valid in contexts implying no reference to a particular group of people to which the agent belongs, but does not extend to contexts implying that the agent belongs to a particular group of people. In such contexts, as illustrated by ex. (12), *on* does not imply any restriction on the extension of the subject argument, contrary to *quelqu'un / des gens*, which suggest that only a relatively low proportion of the persons that were present took part in the event. Sentence (12b) is OK not only for situations that could be described by sentences (12c-d), but also for situations in

reference to which it would be possible to use sentence (12e). A crucial observation is that, when a passive formulation is possible, as in ex. (12), it provides a much better equivalent of 'existential *on*' than formulations using indefinite pronouns or NPs: 'existential *on*' allows for the same indetermination about the subject argument as agentless passives.

(12) a. *Tu   as   été   critiqué   à la   réunion.*
       2SG   have.PRS.2SG be.PTCP criticize.PTCP.SGM at DEF.SGF meeting.SG
       'You have been criticized at the meeting.'

       b. *On   t'   a   critiqué   à la   réunion*
           ON   2SG.ACC   have.PRS.3SG criticize.PTCP.SGM at DEF.SGF meeting.SG
           same meaning as (a)

       c. *Quelqu'un t'   a   critiqué   à la   réunion.*
           someone   2SG.ACC have.PRS.3SG criticize.PTCP.SGM at DEF.SGF meeting.SG
           'Someone criticized you at the meeting'

       d. *Des   gens   t'   ont   critiqué   à la   réunion.*
           INDEF.PL people.PL 2SG.ACC have.PRS.3PL criticize.PTCP.SGM at DEF.SGF meeting.SG
           'Some people criticized you at the meeting'

       e. *Tout le monde t'   a   critiqué   à la   réunion.*
           everybody   2SG.ACC have.PRS.3SG criticize.PTCP.SGM at DEF.SGF meeting.SG
           'Everybody criticized you at the meeting'

In other words, *existential* in the expression 'existential *on*' must be taken in its logical sense 'for at least one person', which contrary to linguistic expressions such as *quelqu'un* 'someone' or *des gens* 'some people' does not imply a relative limitation of the set of the persons taking part in the event.

Moreover, existential *on* sharply contrasts with *quelqu'un* in its scope properties. In negative sentences, as illustrated by ex. (13), there is no equivalence between *quelqu'un* and *on*.

(13) a. *Quelqu'un ne   t'   a   pas   critiqué.*
       someone   NEG   2SG.ACC have.PRS.3SG NEG criticize.PTCP.SGM
       'Someone did not criticize you.' i.e. $\exists$ x, Neg [criticize(x, you)]

       b. *On   ne   t'   a   pas   critiqué*
           ON   NEG   2SG.ACC have.PRS.3SG NEG criticize.PTCP.SGM
           'No one criticized you', 'You were not criticized' i.e. Neg [$\exists$ x, criticize(x, you)]

Similarly, when a temporal adjunct implying repetition is present in postverbal position, the only possible interpretation with *quelqu'un* in subject role is that the same person is involved in the successive occurrences of the event (in logical terms, the iterative operator is under the scope of the existential operator), whereas *on* carries no such entailment – ex. (14).

(14) a. *On   t'   a   appelé   plusieurs   fois.*
         ON   2SG.ACC have.PRS.3SG call.PTCP.SGM several.PL   time.PL
         'There were several phone calls for you', i.e. Iter [∃ x, call(x, you)]

      b. *On   t'   a   appelé   plusieurs   fois,*
         ON   2SG.ACC have.PRS.3SG call.PTCP.SGM several.PL   time.PL
         mais ce   n'   était   pas   la   même   personne.
         but   DEM   NEG   be.IMPF.3SG   NEG   DEF.SGF same.SG   person.SG
         'There were several phone calls for you, but it was not the same person.'

      c. *Quelqu'un t'   a   appelé   plusieurs   fois.*
         someone   2SG.ACC have.PRS.3SG call.PTCP.SGM several.PL   time.PL
         'Someone called you several times.', i.e. ∃ x, Iter [call(x, you)]

      d. **Quelqu'un t'   a   appelé   plusieurs   fois,*
         someone   2SG.ACC have.PRS.3SG call.PTCP.SGM several.PL   time.PL
         mais ce   n'   était   pas   la   même   personne.
         but   DEM   NEG   be.IMPF.3SG   NEG   DEF.SGF same.SG   person.SG

4.2. The discourse inertness of existential *on*

Kœnig 1999 and Kœnig & Mauner 1999, whose study of the discourse properties of *on* concentrates on this type of use, show that the definite pronoun *il* 'he' can refer back to *quelqu'un* 'someone', but not to existential *on*; similarly, the definite plural pronoun *ils* 'they' can refer back to *des gens* 'some people', but not to existential *on* – ex. (15).

(15) a. *Quelqu'un$_i$ t'   a   demandé,*
         someone   2SG.ACC have.PRS.3SG ask.PTCP.SGM
         mais il$_i$ n'   a   pas   pu   attendre.
         but   3SGM   NEG   have.PRS.3SG   NEG   can.PTCP wait.INF
         'Someone$_i$ asked for you, but they$_i$ were not able to wait.'

      b. **On$_i$ t'   a   demandé,*
         ON   2SG.ACC have.PRS.3SG ask.PTCP.SGM
         mais il$_i$ n'   a   pas   pu   attendre.
         but   3SGM   NEG   have.PRS.3SG   NEG   can.PTCP wait.INF
         Intended: 'Someone$_i$ asked for you, but they$_i$ were not able to wait.'

      c. *Des   gens$_i$ t'   ont   demandé,*
         INDEF.PL people.PL 2SG.ACC have.PRS.3PL ask.PTCP.SGM
         mais ils$_i$ n'   ont   pas   pu   attendre.
         but   3PLM   NEG   have.PRS.3PL   NEG   can.PTCP wait.INF
         'Some people$_i$ asked for you, but they$_i$ were not able to wait.'

d. **On$_i$ t'   a   demandé,*

    ON   2SG.ACC   have.PRS.3SG ask.PTCP.SGM

    mais ils$_i$ n'   ont   pas   pu   attendre.

    but   3PLM NEG   have.PRS.3PL NEG   can.PTCP wait.INF

    Intended: 'Some people$_i$ asked for you, but they$_i$ were not able to wait.'

The same contrast is observed, not only within the frame of multi-clausal discourse, but also within the frame of a single sentence – ex. (16).

(16)   a. *Quelqu'un$_i$ a   dit   qu' il$_i$ pouvait   faire ça.*

       someone   have.PRS.3SG say.PTCP COMP 3SGM can.IMPF.3SG do.INF DEM

       'Someone$_i$ said that they$_i$ were able to do that.'

  b. **On$_i$ a   dit   qu' il$_i$ pouvait   faire ça.*

       ON   have.PRS.3SG say.PTCP COMP 3SGM can.IMPF.3SG do.INF DEM

       Intended: 'Someone$_i$ said that they$_i$ were able to do that.'

       Would be OK with disjoint reference: 'Someone$_i$ said that he$_j$ was able to do that.'

As shown by Kœnig 1999, examples such as (17) seem to contradict the statement that existential *on* cannot act as the antecedent of an anaphoric expression, but they do not really violate the discourse inertness of existential *on*, since the anaphoric relation in such a configuration is not direct. It arises from inferences, similarly to what may occur with the implicit agent of short passives.

(17)   *On$_i$ a   tué   le   président ;*

       ON   have.PRS.3SG kill.PTCP DEF.SGM   president.SG

       le   meurtrier$_i$ était   du   Berry.

       DEF.SGM   murderer.SG be.IMPF.3SG   from.DEF.SGM Berry

       'The president was killed; the murderer was from the Berry.'

Similarly, the discourse inertness of existential *on* (i.e., its inability to take part in anaphoric relations other than those arising from inferences) is not contradicted by the possibility of coreference with the unexpressed subject of rationale clauses, as in ex. (18). Here again, this property is shared (at least to some extent) by the implicit agent of short passives.

(18)   *On$_i$ l'   a   tué*

       ON   3SG.ACC have.PRS.3SG kill.PTCP.SGM

       pour   lui$_j$ prendre$_i$ son$_j$ argent.[5]

       in.order.to 3SG.DAT take.INF POSS3SG.SGM money.SG

       'He$_j$ was killed to take his$_j$ money.'

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[5] The indexation of *prendre* in this example is intended to reflect the fact that the implicit subject of this infinitive form (which according to some syntactic theories is represented by invisible "PRO") is identified to the unspecified subject of the main verb, encoded by *on.*

Another property of existential *on* not signaled by Kœnig & Mauner but which is worth emphasizing, since existential *on* contrasts in this respect with other uses of *on*, is that cross-sentential anaphoric coreference involving existential *on* may be impossible, not only with 3rd person pronouns, but also with *on* itself – ex. (19).

(19) *On_i a   tué   le   président ;
      ON   have.PRS.3SG kill.PTCP   DEF.SGM   president.SG

      on_i était   du   Berry.
      ON   be.IMPF.3SG from.DEF.SGM Berry

      Intended: 'Someone$_i$ killed the president; he$_i$ was from the Berry.'

In discourse configurations of this type, *on* can be maintained in the first clause only by using an anaphoric expression lending itself to 'identification through accommodation' – Kœnig & Mauner 1999 (section 4.2), as illustrated by ex. (17). Similarly, in the case of ex. (15), a possible formulation would be *On t'a demandé, mais la personne en question* ('the person in question') *n'a pas pu attendre.*

   There are apparent counterexamples, in which *on* can be interpreted as referring back to a previous occurrence of existential *on*, as in ex. (20a). However, formally identical clause sequences involving two successive occurrences of existential *on* in contexts implying or suggesting disjoint reference are perfectly normal – ex. (20b). This shows that *on* referring back to a previous occurrence of existential *on* is only a possibility in clause sequences in which the second clause does not go beyond the description of a particular aspect or a subsequent stage of the same event.

(20) a. *On_i a   volé   ma   voiture,*
         ON   have.PRS.3SG steal.PTCP POSS1SG.SGF   car.SG

         mais on_i l'   a   abandonnée   peu après.
         but   ON   3SGF.ACC have.PRS.3SG abandon.PTCP.SGF   shortly afterwards

         'My car was stolen, but shortly afterwards it was abandoned'

      b. *On_i a   volé   ma   voiture,*
         ON   have.PRS.3SG steal.PTCP POSS1SG.SGF   car.SG

         mais on_j l'   a   retrouvée   peu après
         but   ON   3SGF.ACC have.PRS.3SG find.PTCP.SGF shortly afterwards

         'My car was stolen, but shortly afterwards it was found'

By contrast, *on* is ruled out if the second clause clearly expresses an intrinsic property of the unspecified subject of the first clause, i.e., a property independent form the event referred to, as was the case in ex. (19). Ex. (21) provides an additional illustration of this impossibility: sentence (21b), in which *parler avec un accent* 'speak with an accent' allows for an episodic interpretation, leaving open the possibility that perhaps the person speaking with a German accent just feigned to have this accent, is much better than (20a), in which the choice of *avoir un accent* 'have an accent' suggests that speaking with a German accent is a permanent property of the person who called.

(21) a. **On*_i *t'*   *a*   *appelé*   *au*   *téléphone;*
       ON   2SG.ACC have.PRS.3SG call.PTCP.SGM at.DEF.SGM   phone.SG

      *on*_i   *avait*   *un*   *accent*   *allemand.*
       ON   have.IMPF.3SG one.SGM accent.SG   German.SGM

      Intended: 'There was a phone call for you; the person in question had a German accent' (OK: *Quelqu'un t'a appelé au téléphone; il avait un accent allemand* 'Someone called you, he had a German accent', or *On t'a appelé au téléphone; la personne en question avait un accent allemand.* 'There was a phone call for you, the person in question had a German accent.')

    b. *On*_i *t'*   *a*   *appelé*   *au*   *téléphone;*
       ON   2SG.ACC have.PRS.3SG call.PTCP.SGM at.DEF.SGM   phone.SG

      *on*_i   *parlait*   *avec* *un*   *accent*   *allemand.*
       ON   speak.IMPF.3SG with one.SGM accent.SG   German.SGM

      'There was a phone call for you; the person in question spoke with a German accent.'

The discourse inertness of existential *on* manifests itself, not only in the strategies that must be used in order to refer back to a participant whose existence is implied by a previous use of *on*, but also in the relation between existential *on* and the preceding context. The use of *on* does not exclude identifying the subject argument to a participant whose existence is implied, either by a previous use of *on*, as in (20a), or by a previous occurrence of an agentless passive, as in (22a). By contrast, *quelqu'un* sounds at best strange in contexts which strongly suggest identifying it as referring back to the implicit argument of an agentless passive, as in ex. (22b).

(22) a. *Ma*   *voiture* *a*   *été*   *volée*_i,
       POSS1SG.SGF car.SG have.PRS.3SG be.PTCP steal.PTCP.SGF

      mais *on*_{i/j}   *l'*   *a*   *abandonnée* *peu après.*
      but ON   3SGF.ACC have.PRS.3SG abandon.PTCP.SGF shortly afterwards

      'My car was stolen, but shortly afterwards it was abandoned'

    b. *Ma*   *voiture* *a*   *été*   *volée*_i,
       POSS1SG.SGF car.SG have.PRS.3SG be.PTCP steal.PTCP.SGF

      mais *quelqu'un*_{*i/j} *l'*   *a*   *abandonnée*   *peu après.*
      but someone   3SGF.ACC have.PRS.3SG abandon.PTCP.SGF   shortly afterwards

      'My car was stolen, but someone abandoned it shortly afterwards' – Impossible with the reading 'My car was stolen, but shortly afterwards the thief abandoned it'

4.3. Existential *on* and reflexive/intensifier binding

In this section, I describe a limitation to the coreference possibilities of existential *on* that is not recognized by Kœnig & Mauner 1999, who argue that "the referent of *on* can be the target of intrasentential reflexive binding" and that here again, this is in accordance with the common assumption that "cross-sentential pronominal coreference differs from both subject PRO anaphoric identification and intrasentential reflexive binding". However, the

data they use to illustrate reflexive binding are partial, and their relevance to the issue of reflexive binding is questionable.

The point is that the only example of reflexive binding presented by Kœnig & Mauner 1999 concerns the so-called reflexive clitic *se*, and is therefore not conclusive for those who think that *se* and its equivalents in other Romance languages are not really involved in *syntactic* reflexive binding, and should rather be analyzed as the trace of a *lexical* operation on the valency of the verb.[6] If we now turn to uncontroversial examples of reflexive binding, what we observe is that possessives, which normally lend themselves to reflexive binding (and can in particular be bound by the implicit subject of uncontrolled infinitives) cannot refer back to existential *on* – ex. (23).

(23) a. *Quelqu'un$_i$ t'   a   laissé   son$_i$ adresse.*
        someone   2SG.ACC   have.PRS.3SG leave.PTCP POSS3SG.SGF   address.SG
        'Someone$_i$ left his$_i$ address for you.'

    b. **On$_i$ t'   a   laissé   son$_i$ adresse.*
        ON   2SG.ACC   have.PRS.3SG leave.PTCP POSS3SG.SGF   address.SG
        Intended: 'Someone$_i$ left his$_i$ address for you.'
        Would be OK with the interpretation 'Someone$_i$ left his$_j$ address for you.'

Similarly, unlike *quelqu'un* 'someone', existential *on* cannot be the antecedent of an intensifier – ex. (24).

(24) a. *Quelqu'un$_i$ a   trouvé   lui-même$_i$ la   solution.*
        someone   have.PRS.3SG find.PTCP   INT.3SGM   DEF.SGF   solution.SG
        'Someone$_i$ has found the solution himself$_i$.'

    b. **On$_i$ a   trouvé   lui-même$_i$ / soi-même$_i$ la   solution.*[7]
        ON   have.PRS.3SG find.PTCP   INT.3SGM / INT   DEF.SGF   solution.SG
        Intended: 'Someone$_i$ has found the solution himself$_i$.'

Curiously, the ban on reflexive binding tends to extend to the implicit subject of infinitives controlled by existential *on*, as in ex. (25b). However, in such a configuration, the unacceptability is less strong than in (23b), and some speakers at least consider such sentences more or less marginally acceptable.

(25) a. *Quelqu'un$_i$ t'   a   appelé   sans   donner$_i$ son$_i$ nom.*
        someone   2SG.ACC   have.PRS.3SG call.PTCP.SGM without   give.INF   POSS3SG.SGF   name.SG
        'Someone$_i$ called you without giving his$_i$ name.'

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[6] Evidence supporting this view is discussed by Alsina 1996 (chapter 6) and Creissels 2006 (chapter 22).

[7] In addition to intensifiers formed by adding *-même* to personal pronouns, French has an intensifier *soi-même* which, like the reflexive pronouns *soi* from which it is formed, can be bound by generic subjects only.

b. ??*On$_i$ t'   a   appelé   sans   donner$_i$ son$_i$ nom.*
   ON 2SG.ACC have.PRS.3SG call.PTCP.SGM without give.INF POSS3SG.SGF name.SG
   'Someone$_i$ called you without giving his$_i$ name.'

4.4. Conclusion of section 4

The observations analyzed in section 4 can be summarized by saying that, apart from anaphoric relations involving *inference* rather than *coreference* proper and following from the process of *accommodation* analyzed in detail by Kœnig & Mauner 1999 within the framework of Discourse Representation Theory, the only anaphoric mechanisms in which existential *on* can assume the role of antecedent are those involving the implicit argument of infinitives in control constructions (2.3) and the reflexive reading of *se* (4.3).[8]

5. Coreference properties of gnomic *on*

5.1. Gnomic *on*

'Gnomic *on*' refers here to the use of *on* in sentences expressing generalizations devoid of any temporal anchoring about humans in general, or about subgroups of humans whose delimitation may be variously suggested by the context, often (but not necessarily) with a normative flavor – ex. (26).[9]

(26) a. *En   vieillissant, on   a   besoin   d' aide.*
        in   get.old.GER ON   have.PRS.3SG need.SG   of help.SG
        'When one gets old, one needs help.'

     b. *En   Italie,   on   sait   préparer   les   pâtes.*
        in   Italy   ON   know.PRS.3SG prepare.INF DEF.PL pasta.PL
        'In Italy, they know how to prepare pasta.'

In ex. (26b) above, but not in (26a), arbitrary *ils* 'they' provides a possible paraphrase of gnomic *on* (*En Italie, ils savent préparer les pâtes*). The explanation is that arbitrary *ils* implies an exclusive reading (i.e., is limited to generalizations over groups to which the speech act participants do not belong), whereas gnomic *on* is not sensitive to the *inclusive* vs. *exclusive* distinction. For example, (27a) can indifferently be uttered by speakers living in town or in the countryside, whereas (27b) implies that both the speaker and the addressee live in town.

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[8] Although this is not directly relevant to the issue addressed in this paper, it is worth noting that this supports the view that infinitive control and the interpretation of *se* involve *lexical* operations rather than *syntactic* configurations including invisible pronouns, since the invisible pronouns posited in order to explain these mechanisms should be able to resume antecedents that are not accessible to ordinary pronouns.

[9] The choice of the term *gnomic* rather than *generic* is motivated by the relative imprecision of *generic*, the use of which is not limited to utterances expressing the precise type of meaning considered in this section. The necessity of introducing this narrow notion of gnomicity follows from the fact that, as will be shown in section 6.1.1, some uses of *on* that fall under the current definition of genericity have coreference properties different from those found in the use of *on* characterized here as *gnomic*. On genericity, see among others Krifka & al. 1995, Papafragou 1996, Malamud 2006.

(27) a. *A la   campagne,   on   mange   des   légumes*
   at DEF.SGF   countryside.SG   ON   eat.PRS.3SG   some.PL   vegetable.PL
   qu'   on   fait   pousser   soi-même   dans   son   jardin.
   REL   ON   make.PRS.3SG grow.INF INT   in   POSS3SG.SGM garden.SG
   'In the countryside, one eats vegetables one grows oneself in one's garden.'

  b. *A la   campagne,   ils   mangent   des   légumes*
   at DEF.SGF   countryside.SG   3PLM   eat.PRS.3PL   some.PL   vegetable.PL
   qu'   ils   font   pousser   eux-mêmes dans leur   jardin.
   REL   3PLM   make.PRS.3PL grow.INF INT.3PLM   in   POSS3PL.SGM garden.SG
   'In the countryside, they$_{arb}$ eat vegetables they grow themselves in their garden.'

5.2. Gnomic *on* and inter-sentential anaphoric processes

Like existential *on*, gnomic *on* is not available as a possible antecedent for 3rd person pronouns, but sequences of clauses including several occurrences of gnomic *on* expressing generalizations over the same subgroup of humans are perfectly normal – ex. (28).

(28) *A Noël,   on$_i$ décore   un   arbre   de Noël,*
   at Christmas   ON   decorate.PRS.3SG   one.SGM tree.SG   of Christmas
   At Christmas, people decorate a Christmas tree,

   on$_i$ achète   des   cadeaux   pour ses$_i$ proches,
   ON   buy.PRS.3SG   some.PL   present.PL   for   POSS3SG.PL   relative.PL
   they buy presents for their close relatives,

   et   on$_i$ essaie   de   deviner
   and   ON   try.PRS.3SG   COMP   find.out.INF
   les   cadeaux   qu'   on$_i$ recevra   soi-même$_i$.
   DEF.PL present.PL   REL   ON   receive.FUT.3SG   INT
   and they try to find out the presents they will get themselves.'

In this respect (the ability to be repeated without varying in its reference), the behavior of gnomic *on* is similar to that of personal pronouns.

5.3. Gnomic *on* and intra-clausal anaphoric processes

In ex. (28) above, the second clause shows that, unlike existential *on*, gnomic *on* is a possible antecedent of possessives, and the third clause shows that, contrary to existential *on*, gnomic *on* can bind the intensifier *soi-même* 'oneself'.
 Ex. (29) provides an additional illustration of 3rd person possessives referring back to gnomic *on*.

(29) *On*$_i$ *n'* *abandonne* *pas* *ses*$_i$ *amis* *dans* *le* *besoin.*
    ON NEG abandon.PRS.3SG NEG POSS3SG.PL friend.PL in DEF.SGM need.SG
    'One does not abandon one's friends when they need help.'

Ex. (30) shows that gnomic *on* is a possible antecedent of the reflexive pronoun *soi.*

(30) a. *Quand* *on*$_i$ *est* *seul,* *on*$_i$ *ne* *compte* *que* *sur* *soi*$_i$.
      when ON be.PRS.3SG alone.SGM ON NEG rely.PRS.3SG RESTR on REFL
      'When one is alone, one relies only on oneself.'

In spite of the fact that gnomic *on* is often interchangeable with plural expressions like *les gens* or *ils*, it requires the 3rd person singular form of the possessives it binds. It is also worth noting that, in contrast to arbitrary *ils*, possessives referring back to gnomic *on* force a distributive interpretation of the possessive relation, and cannot be used for situations implying a collective reading – ex. (31).

(31) a. *En* *France,* *ils*$_i$ *célèbrent* *la / leur*$_i$ *fête* *nationale*
      in France 3PLM celebrate.PRS.3PL DEF.SGF / POSS3PL.SGF holiday.SG national.SGF
      le *14* *juillet*
      DEF.SG 14 July
      'In France, they$_{arb}$ celebrate (their) National Day on July 14'

    b. *En* *France,* *on* *célèbre* *la / *sa / *leur* *fête* *nationale*
      in France ON celebrate.PRS.3SG DEF.SGF / *POSS3SG.SGF / *POSS3PL.SGF holiday.SG national.SGF
      le *14* *juillet.*
      DEF.SG 14 July
      'In France, National Day is celebrated on July 14.'

    c. *On*$_i$ *célèbre* *son*$_i$ *anniversaire* *en* *famille.*
      ON celebrate.PRS.3SG POSS3SG.SGM birthday.SG in family.SG
      'One celebrates one's birthday as a family party.'

5.4. Coreference properties of gnomic *on* in complex constructions

The third clause of ex. (28) above shows that *on* in a subordinate clause can refer back to gnomic *on* in the role of subject of the main verb. Ex. (32) shows that, in such configurations, the second occurrence of *on* is equivalent to a 3rd person pronoun referring back to a variable bound by a distributive operator, and cannot be viewed as the mere repetition of *on* expressing a generalization over a group of persons, since *Everybody thinks that everybody is different from the others* or *Everybody always wants more than everybody has* are not possible paraphrases.

(32) a. *On*$_i$ *croit* *qu'* *on*$_i$ *est* *différent* *des* *autres.*
      ON believe.PRS.3SG COMP ON be.PRS.3SG different.SGM from.DEF.PL other.PL
      'Everybody thinks that they are different from the others.'

b. *On$_i$ veut   toujours plus que ce   qu' on$_i$ a.*

   ON   want.PRS.3SG always more than DEM REL ON have.PRS.3SG

   'Everybody always wants more than they have.'

Ex. (33) shows that complex constructions allow for anaphoric relations between gnomic *on* in antecedent role and 2nd person plural pronouns assuming syntactic roles other than subject.

(33) a. *On$_i$ attend   toujours des   autres qu' ils   vous$_i$ aident.*

        ON   expect.PRS.3SG always from.DEF.PL other.PL COMP 3PLM 2PL.ACC help.SBJV.3PL

        'One always expects help from the others.', lit. 'One$_i$ always expects from the others that they help you$_i$.'

  b. *On$_i$ ne sait   jamais ce   que l'   avenir vous$_i$ réserve.*

     ON   NEG know.PRS.3SG never   DEM REL   DEF.SGM future.PL 2PL.DAT reserve.PRS.3SG

     'One never knows what may happen', lit. 'One$_i$ never knows what the future reserves for you$_i$.'

  c. *Quand on$_i$ est   jeune,   tout   vous$_i$ semble   possible.*

     when   ON   be.PRS.3SG young.SGM everything 2PL.DAT seem.PRS.3SG possible.SGM

     'When one is young, one gets the impression that everything is possible.'

This use of 2nd person pronouns is consistent with the fact that, in generic sentences expressing generalizations about humans, second person pronouns constitute possible equivalents of *on*. However, only 2nd person *plural* pronouns have the ability to refer back to gnomic *on* – ex. (34a), whereas in similar sequences using exclusively 2nd person pronouns receiving an arbitrary reading, the singular is perfectly normal in familiar speech register – ex. (34b).

(34) a. **On$_i$ attend   toujours des   autres qu' ils   t'$_i$ aident.*

        ON   expect.PRS.3SG always from.DEF.PL other.PL COMP 3PLM 2SG.ACC help.SBJV.3PL

        Intended: 'One always expect help from the others'

  b. *Tu$_i$ attends   toujours des   autres qu' ils   t'$_i$ aident.*

     2SG   expect.PRS.3SG always from.DEF.PL other.PL COMP 3PLM 2SG.ACC help.SBJV.3PL

     'You always expect from the others that they help you.', with (depending on the context) the possibility of an arbitrary reading of *you*

Ex. (35) illustrates the possibility that gnomic *on* in the subject clitic slot of the main verb acts as the antecedent of a 2nd person plural pronoun belonging to a subordinate clause whose subject is existential *on.*

(35)   *On$_i$ veut   toujours plus que ce   qu' on$_j$ vous$_i$ donne.*

       ON   want.PRS.3SG always more than DEM REL ON   2PL.DAT give.PRS.3SG

       'Everybody always wants more than they are given.'

5.5. Conclusion of section 5: gnomic *on* and the implicit subject of uncontrolled infinitives

Unlike existential **on**, gnomic **on** is discursively active, and shows coreference properties to some extent comparable to those of personal pronouns. However, in its coreference properties, gnomic **on** shows even more striking similarities with the implicit subject of uncontrolled infinitives, since it shares with it the property of being a possible antecedent of 3rd person possessives – ex. (36), of **on** in subject role – ex. (37), of 2nd person plural **vous** in syntactic roles other than subject – ex. (38), and of the reflexive pronoun **soi** – ex. (39).

(36) a. *On$_i$ aide   ses$_i$ amis.*
          ON   help.PRS.3SG   POSS3SG.PL   friend.PL
          'One helps one's friends.'

   b. *Aider$_i$ ses$_i$ amis   est   un   devoir.*
          help.INF   POSS3SG.PL   friend.PL   be.PRS.3SG   ONE   duty.SG
          'To help one's friends is a duty.'

(37) a. *On$_i$ oublie   facilement ce   qu'   on$_i$ a   promis.*
          ON   forget.PRS.3SG   easily   DEM   REL   ON   have.PRS.3SG promise.PTCP
          'One forgets one's promises easily.'

   b. *Oublier$_i$ ce   qu'   on$_i$ a   promis   n'   est   pas   bien.*
          forget.INF DEM   REL   ON   have.PRS.3SG promise.PTCP NEG   be.PRS.3SG NEG   well
          'It is not good to forget one's promise.'

(38) a. *On$_i$ aide   ceux   qui   vous$_i$ ont   aidé.*
          ON   help.PRS.3SG   DEM.PLM   REL   2PL.ACC   have.PRS.3PL help.PTCP
          'Everybody helps those that helped them.'

   b. *Aider$_i$ ceux   qui   vous$_i$ ont   aidé   est   un   devoir.*
          help.INF   DEM.PLM   REL   2PL.ACC   have.PRS.3PL   help.PTCP be.PRS.3SG one.SGM duty.SG
          'To help those by which one was helped is a duty.'

(39) a. *Quand on$_i$ est   seul,   on$_i$ ne   compte   que   sur   soi$_i$.*
          when   ON   be.PRS.3SG alone.SGM ON   NEG   rely.PRS.3SG RESTR on   REFL
          'When one is alone, one relies only on oneself.'

   b. *Il   est   prudent   de   ne   compter$_i$ que   sur   soi$_i$.*
          3SGM   be.PRS.3SG advisable.SGM COMP NEG   rely.PRS.3SG RESTR on   REFL
          'It is advisable to rely only on oneself.'

6. Two varieties of impersonal *on*

In this section, I examine some typical uses of impersonal **on**, divided into those showing the same discourse inertness as existential **on** (whose coreference properties have been

presented in section 4), and those showing the same discourse availability as gnomic *on* (whose coreference properties have been presented in section 5).

6.1. Discursively inert *on*

6.1.1. Existential on *in generic sentences*

In section 4, the discourse inertness of existential *on* has been illustrated in episodic sentences, but existential *on* in generic sentences is equally unable to act for example as the antecedent of possessives – ex. (40).

(40) a. *Tous   les   soirs,   quelqu'un$_i$ gare   sa$_i$ voiture*
         all.PLM   DEF.PLM   evening.PL   someone   park.PRS.3SG POSS3SG.SGF car.SG
         devant   ma   porte.
         in.front.of   POSS1SG.SGF   door.SG
         'Every evening somebody$_i$ parks their$_i$ car in front of my door.'

     b. **Tous   les   soirs,   on$_i$ gare   sa$_i$ voiture*
         all.PLM   DEF.PLM   evening.PL   ON   park.PRS.3SG POSS3SG.SGF car.SG
         devant   ma   porte.
         in.front.of   POSS1SG.SGF   door.SG
         Intended: 'Every evening somebody$_i$ parks their$_i$ car in front of my door.'

What seems to be relevant here is that the generalization expressed by this sentence is not about (a group of) people, but about events occurring in a given place.

6.1.2. Author's on

The use of *on* constitutes a common strategy for avoiding the use of 1st person pronouns in scientific style, as in ex. (41).

(41)   *Dans cet   article   on   montrera   que …*
         in   DEM.SGM   article.SG ON   show.FUT.3SG COMP
         'In this article it will be shown that …'

But in spite of the fact that, in such contexts, *on* is truth-conditionally equivalent to *je* 'I', it is not available as an antecedent of 1st person possessives, and 3rd person possessives cannot refer back to this variety of *on* either – ex. (42).

(42)   **On$_i$ présentera   plus loin ma$_i$ / sa$_i$ propre   analyse.*
         ON   present.FUT.3SG   below   POSS1SG.SGF / POSS3SG.SGF own   analysis.SG
         Intended: 'I will present my own analysis below.'
         OK: *Je présenterai plus loin ma propre analyse.* or *Nous présenterons plus loin notre propre analyse.*

6.1.3. Corporate on

The 'corporate' use of **on** is illustrated by ex. (43). In this use, **on** is in competition with arbitrary *ils* 'they', whose use in French is otherwise relatively limited, and is commonly stigmatized as 'familiar'.

(43) a. *On   va   encore   augmenter les   impôts.*
         ON   go.PRS.3SG   again   raise.INF   DEF.PL tax.PL
         'Taxes will be raised again.'

      b. *Ils   vont   encore   augmenter les   impôts.*
         3PL   go.PRS.3PL   again   raise.INF   DEF.PL tax.PL
         id.

What is essential in this use of **on** or *ils* is that the meaning of the VP plays a crucial role in the identification of the plural individual to which the subject argument is identified: 'The people who have the power to fix taxes, i.e. the government'.

Here again, possessives cannot refer back to this variety of **on**, whereas they are perfectly possible in the synonymous formulation with *ils* – ex. (44).

(44)   *On_i va   augmenter les   impôts*
          ON   go.PRS.3SG   raise.INF   DEF.PL tax.PL
         pour   financer ses_i / $leurs_i$ réformes.
         in.order.to   finance.INF   POSS3SG.PL / POSS3PL.PL   reform.PL
         Intended: 'They (i.e., the government) are going to raise taxes in order to finance their reforms.'
         OK: *Ils_i vont augmenter les impôts pour financer $leurs_i$ réformes.*

6.2. Discursively active *on*

6.2.1. Instructive on

On can refer to members of a group to whom the speaker gives instructions. As illustrated by ex. (45), **on** in this use is discursively active.

(45)   *Maintenant on_i vérifie   qu' on_i a   bien ses_i papiers.*
         now   ON   check.PRS.3SG   COMP   ON   have.PRS.3SG indeed   POSS3SG.PL   paper.PL
         'Now everybody checks that they have their papers.'

6.2.2. Experiencer on

In the use of **on** illustrated by ex. (46), the speaker generalizes his/her own perception of a situation: 'I have the impression that it will rain, and I guess that other people have the same impression'. Ex. (46b) shows that **on** in this use is discursively active.

(46) a. *On   a   l'   impression   qu'   il   va   pleuvoir.*
      ON   have.PRS.3SG   DEF.SGF   impression.SG   COMP   3SG   go.PRS.3SG   rain.INF
      'One has the impression that it is going to rain.'

    b. *On$_i$ n'   en   croit   pas   ses$_i$ yeux.*
      ON   NEG   ABL   believe.PRS.3SG   NEG   POSS3SG.PL   eye.PL
      'One does not believe one's eyes.'

6.2.3. De-personalizing *on*

In this use, often characterized as 'stylistic' in French grammars or dictionaries, *on* refers to specific individuals that could be designated by 2nd or 3rd person pronouns without changing the truth-value of the sentence. This use of *on* typically implies a condescending attitude towards the person referred to. In assertive sentences, it usually marks that the event is viewed by the speaker as exceptional, or deviating from normality, often with shades of surprise and/or irony or contempt. As illustrated by ex. (47), typically uttered in situations in which the person(s) in question is/are not supposed to wear new shoes, *on* in this use is discursively active.

(47) *Je   vois   qu'   on$_i$ a   mis   ses$_i$ chaussures neuves.*
      1SG   see.PRS.1SG   COMP   ON   have.PRS.3SG   put.on.PTCP   POSS3SG.PL   shoe.PL   new.PLF
      'I see that you are wearing your new shoes / he is wearing his new shoes /she is wearing her new shoes / they are wearing their new shoes.'

In interrogative sentences, the use of *on* referring to specific individuals that could be designated by 2nd or 3rd person pronouns presupposes a hierarchical relation whereby the speaker qualifies to check the behavior of the person in question. Interrogative sentences of this type are typically used by adults in interactions with children – ex. (48).

(48) *On$_i$ a   bien   mangé   sa$_i$ soupe ?*
      ON   have.PRS.3SG   indeed   eat.PTCP   POSS3SG.SGF   soup.SG
      'Did you eat your soup (as was expected from you)?'

6.3. Three minimal pairs

On may sometimes be ambiguous between two readings, and in such cases, it may happen that the establishment of an anaphoric relation excludes one of the possible interpretations. For example, sentence (49a) is ambiguous between an existential reading ('At least one of the persons at the place in question can speak French') and a reading in which it refers to a typical behavior of the people that live at the place in question. But the first interpretation is ruled out if a possessive referring back to *on* is introduced, as in (49b), which cannot be interpreted as 'At least one of the persons at the place in question speaks French to his/her children'.

(49) a. *Ici   on   parle   français.*
     here   ON   speak.PRS.3SG   French
     'French is spoken here.'

    b. *Ici   on   parle   français à ses   enfants.*
     here   ON   speak.PRS.3SG   French   to   POSS3SG.PL   child.PL
     'The people that live here usually speak French to their children.'

Ex. (44) above, repeated here as (50a), illustrates the discourse inertness of corporate *on* in an episodic sentence. Ex. (50b) shows that, in generic sentences, corporate *on* may be discursively active, provided the generalization concerns the behavior of groups of people (here, freshly elected governments).

(50) a. **On_i   va   augmenter les   impôts*
     ON   go.PRS.3SG   raise.INF   DEF.PL   tax.PL
    pour   financer   ses_i / leurs_i   réformes.
    in.order.to   finance.INF   POSS3SG.PL / POSS3PL.PL   reform.PL
    Intended: 'They (i.e., the government) are going to raise taxes in order to finance their reforms.'

    b. *Après les   élections,   on_i   augmente les   impôts*
     after   DEF.PL   election.PL   ON   raise.PRS.3SG   DEF.PL   tax.PL
    pour   financer   ses_i   promesses électorales.
    in.order.to   finance.INF   POSS3SG.PL   promise.PL   vote.catching.PLF
    'After the elections they usually raise taxes in order to finance their vote-catching promises.'

The first sentence of ex. (51) is a typical illustration of gnomic *on*. (51b) might suggest that, with the same predicate in an episodic sentence, *on* loses (or at least tends to lose) its discourse availability. However, (51c) shows that, in spite of the episodic character of the sentence, the insertion of an adjunct suggesting some other kind of generalization restores the discourse availability of *on*.

(51) a. *A Noël,   on_i   fait   des   cadeaux   à ses_i   enfants.*
     at   Christmas   ON   make.PRS.3SG   some.PL   present.PL   to   POSS3SG.PL   child.PL
     'At Christmas, one makes presents to one's children.'

    b. ??*Hier   c'   était   Noël,*
     yesterday   DEM   be.IMPF.3SG   Christmas
    on_i   a   fait   des   cadeaux   à ses_i   enfants.
    ON   have.PRS.3SG   make.PTCP   some.PL   present.PL   to   POSS3SG.PL   child.PL
    Intended: 'Yesterday was Christmas, people made presents to their children.'

    c. *Hier   c'   était   Noël,   partout   en France*
     yesterday   DEM   be.IMPF.3SG   Christmas   everywhere   in   France

on_i	a	fait	des	cadeaux	à	ses_i	enfants.
ON	have.PRS.3SG	make.PTCP	some.PL	present.PL	to	POSS3SG.PL	child.PL

'Yesterday was Christmas, everywhere in France people made presents to their children.'

6.4. Discussion

This enumeration of typical uses of impersonal *on* classified according to their coreference properties raises the question of the conditioning of the variations observed. Many recent studies of the semantics of arbitrariness have pointed to the relevance of the *episodic* vs. *generic* distinction in the choice between (quasi-)existential and (quasi-)universal readings of unspecified subject constructions.[10] But the data examined in sections 6.1 to 6.3 shows that, by itself, the distinction between episodic and characterizing (or generic) sentences is not sufficient to provide a universally valid explanation of the distinction between discursively inert and discursively active *on.*

However, with one exception ('de-personalizing *on*', examined in section 6.2.3, which obviously relies on a marked discourse strategy I will not try to explain here), the uses in which *on* shows discourse availability can be characterized as (quasi-)universal in the sense that they have in common the expression of a generalization over a more or less clearly identifiable set of human beings, whereas those showing discourse inertness do not lend themselves to such a characterization.

In other words, in the discursively active uses of *on*, the semantic characterization of the subject argument includes the feature [+sum individual] in addition to the feature [+human] common to all of the uses of *on*, and the predication involves generalization over the atomic individuals whose sum constitutes the referent of the subject argument.

It seems therefore reasonable to suppose that the (quasi-)existential reading of *on*, characterized by discourse inertness, is the default reading that arises when nothing is added to the characterization of the subject argument as [+human], and that the relative discourse availability shown by impersonal *on* in some of its uses results from a richer semantic specification implying the presence of some generalization operator.

The authors that have analyzed the conversion of nouns meaning 'man' into impersonal pronouns agree that, historically, the development of uses of the type designated here as 'gnomic' precedes the development of (quasi-)existential uses:

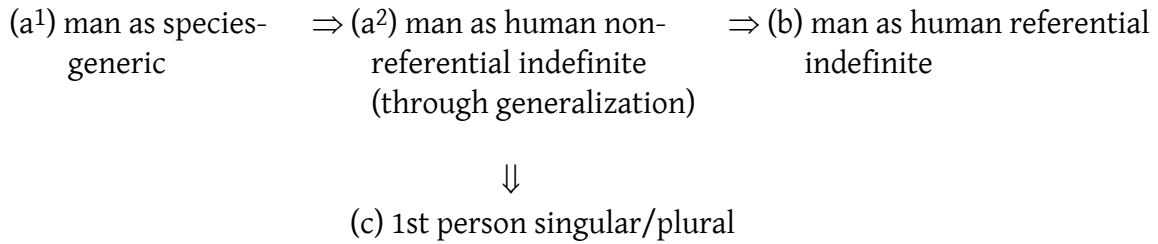(52)   **The diachronic development of HOMO-indefinites** (Egerland 2006)
  a. A lexical DP that is kind-denoting under the scope of a generic operator >
  b. A nominal generic indefinite expression that is not kind-denoting >
  c. A nominal indefinite expression that may appear in episodic contexts

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[10] On a possible relationship between the *episodic* vs. *generic* distinction and the interpretation of arbitrary null pronominals, see Cinque 1988, Condoravdi 1989, Alonso-Ovalle 2000.

(53)   **A grammaticalization path for *man*** (Giacalone & Sansò 2007a)

(a^1) man as species-
     generic

$\Rightarrow$ (a^2) man as human non-
       referential indefinite
       (through generalization)

$\Rightarrow$ (b) man as human referential
       indefinite

$\Downarrow$

(c) 1st person singular/plural

Historically, the feature [+sum individual] that conditions the discourse availability of *on* constitutes therefore the retention of what was at an early stage of the evolution an intrinsic property of *on*, and the possible deletion of this feature, resulting in the discourse inertness observed in some uses of *on*, constitutes a relatively recent development.

7. Conclusion

In this paper, after presenting the general properties of *on* (section 2), I have shown that the inability to refer back to a topicalized NP or pronoun provides a general characterization of the uses of *on* other than its use as a 1st person plural subject clitic (section 3). In sections 4 and 5, I have analyzed two particular uses of impersonal *on* that clearly contrast in their discourse behavior: existential *on* shows coreference properties comparable to those of the implicit argument of agentless passives (section 4), whereas the availability of gnomic *on* as an antecedent in various types of anaphoric relations is similar to that of the implicit subject of uncontrolled infinitives (section 5). In section 6, after briefly presenting other uses of impersonal *on* classified according to their coreference properties, I have concluded that the choice between the two possible discourse behaviors of impersonal *on* is not directly triggered by the *episodic* vs. *generic* distinction, but rather by the addition of the feature [+sum individual] to the specification of the subject argument of verbs hosting *on* in the subject clitic slot as [+human].

   This conclusion raises in particular the following question, which should be the object of future investigations: since morphosyntactically, irrespective of the variety of readings it may receive, *on* very clearly remains a subject pronoun, to what extent are its coreference properties still conditioned by its nominal origin? More generally, do the coreference properties of unspecified subjects in constructions involving impersonal pronouns differ significantly from the coreference properties of unspecified subjects in other types of constructions that suspend the expression of the subject argument without removing it from argument structure and without affecting other aspects of verbal valency?

   The Estonian data analyzed by Kaiser & Vihman 2006 rather suggest a negative answer, and returning to *on*, serious doubts arise from the mere fact that the coreference properties of the two varieties of impersonal *on* are similar to those of the implicit argument of agentless passives on the one hand, and of the implicit subject of uncontrolled infinitives on the other hand, i.e., of two types of implicit arguments that have no historical link with pronouns. But it would certainly be premature to put forward generalizations before having at one's disposal more detailed studies of the coreference properties of impersonal pronouns and implicit subjects in a variety of languages, as well as precise data about the changes that may occur in the coreference properties of emerging impersonal pronouns at

early stages of the grammaticalization processes that convert nouns into impersonal pronouns.

Acknowledgements

Abbreviations

ABL: ablative clitic	INDEF: indefinite	PRS: present
ACC: accusative	INF: infinitive	PTCP: participle
COMP: complementizer	INT: intensifier	REFL: reflexive
DAT: dative	LOC: locative clitic	REL: relativizer
DEF: definite	NEG: negation	RESTR: restrictive
DEM: demonstrative	PL: plural	SBJV: subjunctive
FUT: future	PLF: plural feminine	SG: singular
GER: gerund	PLM: plural masculine	SGF: singular feminine
IMPF: imperfect	POSS: possessive	SGM: singular masculine

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