Layers of Aspect

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When Perfect means "Plural": The Present Perfect in Northeastern Brazilian Portuguese

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4.1 Introduction

One of the most puzzling facts in the study of “compound tenses” is that those whose auxiliary is in the present indicative usually show a different, more restricted distribution than non-present or non-indicative forms.¹

In this paper, we describe the Present Perfect in a variety of Brazilian Portuguese spoken in Natal, in Northeastern Brazil. In general, the Portuguese Present Perfect is treated as an example of a so-called “STAGE II-PRESENT PERFECT”, which is only natural in continuative or repetitive contexts (Squartini and Bertinetto, 2000), and can be assimilated to a genuine “universal” perfect, insofar as the described eventuality holds at all times throughout an interval whose right boundary cannot strictly precede Utt-T.²

The Present Perfect in the variety of Brazilian Portuguese described here exhibits still stronger re-

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²Following Demirdache and Uribe-Extebarria (2004), we use Ev-T (= Event-Time) for the temporal trace of the eventuality, Ast-T (= Assertion-Time) for the time of evaluation, and Utt-T (= Utterance Time) for the time of speech.
strictions concerning both the length of the Perfect Time Span and the internal structure of this interval. The latter restrictions lead us to analyse it as a temporal pluractional, contributing a pluractional condition which is underspecified as to the major known flavours of pluractionality (frequentative, habitual, incremental). Other, better described, pluractional operators only affect the temporal structure of the eventuality; the Present Perfect described here additionally determines a particular relation between this temporal structure and the time of evaluation, and of the time of evaluation and Utt-T. Thus, the form INDICATIVE PRESENT+ter ‘have’ + PP conflates the expression of eventuality modification with that of the relations between Ev-T and Ast-T and between Ast-T and Utt-T.

The paper is organised as follows: Section 4.2 presents the main characteristics of the Present Perfect in the variety of Brazilian Portuguese examined here (PRES-PERF in what follows). Section 4.3 introduces our analysis. We first present our analysis in terms of a pluractional operator (section 4.3.1) and adduce evidence for the parallels of the PRES-PERF with pluractional markers in other languages (section 4.3.2). Section 4.33 discusses the discontinuity requirement on the PRES-PERF while sections 4.3.4 and 4.3.5 discuss the links between the PRES-PERF and habituality. Section 4.4 discusses the condition of discontinuity on the perfect interval, Section 4.5 takes up the issue of compositionality and compares the proposed analysis with the analyses of Giorgi and Pianesi (1997) and Schmitt (2001). Section 4.6 outlines an explanation as to the possible sources of the observed peculiarities of the Present Perfect in Portuguese. Section 4.7 concludes the paper.

4.2 Peculiarities of the Present Perfect in Northeastern-Brazilian Portuguese

In what follows we examine the properties of the ter ‘have’ + PP construction with an invariant participle (corresponding to the masculine singular form) in the variety of Brazilian Portuguese spoken in Natal in Northeastern Brazil. We will refer to this construction in this particular variety as the PRES-PERF in what follows.3

3Ter also appears in a different construction, involving a direct object and an agreeing past participle. This second construction has a resulative interpretation, and is characterised by the fact that the object may precede the agreeing participle. Its distribution shows considerable cross-dialectal variation. The English renderings of the examples below illustrate the contrast between both constructions in the variety described by Schmitt (2001):

(i) a. Eu tenho feito as camas.
   I have.PRS.1SG make.PP the beds.FEM.PL
   ‘I have been making the beds.’

   b. Eu tenho feitas as camas desde segunda feira.
   I have.PRS.1SG make.PP.FEM.PL the beds.FEM.PL since Monday
The use of the Pres-Perf in the variety we describe not only differs quite spectacularly from the Present Perfect in other languages, but also shows subtle but clear differences when compared to the European Portuguese Present Perfect, to some restrictive American Spanish varieties usually mentioned as instances of a “Stage II- Present Perfect”, and even to other varieties of Brazilian Portuguese, as described for instance in Schmitt (2001). We will therefore begin with a detailed description of the peculiarities of the Pres-Perf.

4.2.1 Pres-Perf versus other perfect forms

As is generally the case throughout Portuguese varieties (see Amaral and Howe 2004, Schmitt 2001, Squartini 1998, 154), the distribution of the Pres-Perf clearly differs from the distribution of other Perfect forms where the perfect auxiliary is not in the present indicative.

The following contrasts show that examples that are perfectly acceptable with a pluperfect (1a), with a prospective (future) perfect (2a), or with a perfect subjunctive (3a) become degraded with the Pres-Perf (see b-examples):

(1) a. Eu não encontrei ela. Ela tinha saído.
   I not find.PF.1SG she have.IMPF.3SG go-out.PP
   ‘I didn’t find her. She had gone out.’
   b. Eu não encontro ela. # Ela tem saído [ok.saiu].
   I not find.PR.1SG she. She has go-out.PP [go-out.PF.3SG]
   ‘I don’t find her. She has gone out.’

(2) a. Pedro vai entrar pela porta de trás. Eu ja
   Pedro go.PR.3SG enter.INF by+the door behind I already
   vou ter desarmado o segurança.
   go.PR.1SG have.INF disarm.PP the guard
   ‘Pedro will come in through the back door. I will have already disarmed the guard.’

c. Eu tenho as camas feitas desde segunda feira.
   I have.PR.1SG the beds.FEM.PL make.PP.FEM.PL since Monday
   ‘I have the beds ready since Monday.’

4 Abbreviations used in the glosses: GER = gerund, IMPF = imperfective past, INF = infinitive, LOC = locative, NEG = negation, PF = perfective past, PL = plural, PP = past participle, PR = present, SG = singular, SUBJ = subjunctive. For brevity, we will gloss ter.PR.3SG by has.
4.2.2 No resultative or anteriority readings for the PRES-PERF

As the examples in (1)-(3) illustrate, the occurrence of a single event in the past, even if its result state holds at Utt-T (resultative) or if it has relevant consequences for the present (experiential) does not warrant the use of a PRES-PERF.

The PRES-PERF also lacks other typical uses of Present Perfects, such as (i) inferential uses, in which the occurrence of a previous event is inferred as the cause of a present state of affairs (4a); (ii) combinations with já ‘already’ (4b); (iii) generic/habitual contexts, in which anteriority is computed with regard to a recurrent contextually given anchor (4c-d); (iv) future perfect uses, in which anteriority is computed not with regard to Utt-T but to a contextually given forward-shifting anchor (4e).5

In contexts (4a-d), the simple (perfective) past is the preferred form. For (4d), our informant also proposed epistemic dever, ‘must’ with a perfect infinitive:

(i) Deve ter chovido/ Parece que choveu.
   must.PR.3SG have.rained/ seem.PR.3SG that rain.PF.3SG
   ‘It must have rained/ It looks like it has rained.’

As for the future perfect reading (4e), which is judged acceptable in the variety described by Amaral and Howe (2004) and is mentioned in grammars, none of our consultants – including European Portuguese speakers – accepts it, volunteering instead the prospective/ future perfect form vai ter acabado/ terá acabado.
(4) a. Situation: It is morning. A wakes up, looks out of the window and sees that the street is wet (taken from the Perfect Questionnaire in Dahl (2000), question 14).

# Tem chovido durante a noite.
has rain.PP during the night
‘It has rained during the night.’

b. Ela (#já) tem escrito artigos.
she (already) has write.PP articles
‘She has already written articles.’

c. # Ultimamente, quando eu ligo, o responsável
lately when I phone.PR.1SG, the person in charge
tem saído.
has go-out.PP
‘These days, every time I phone, the person in charge is away.’

d. Aqueles que # têm frequentado a mesma escola são
those that have.PR3PL attend.PP the same school are
solidários durante toda a vida.
united during all the life
‘Those who have attended school together develop a solidarity for life.’

e. # Quando a Ana regressar de Groningen, já tu
tens acabado a tese
when the Ana return.INF of Groningen already you
have.PR.2SG finish.PP the thesis
‘When Ana gets back from Groningen, you will have already finished your thesis.’ (Amaral and Howe, 2004, ex.12)

The data given above can be taken to indicate that this set of uses are intimately linked to resultative/antioriety readings, which the PRES-PERF simply lacks.

4.2.3 The universal readings of the PRES-PERF

We have seen above that the PRES-PERF does not have existential or resultative readings. As is well known, the other bundle of readings of Present Perfects – the ones from which analyses of the Perfect in terms of a Perfect Time Span derive their clearest support\(^6\) – fall under the category of Universal (or Inclusive) Perfects, illustrated for English in (5a-b):

\(^6\)The Perfect Time Span is an interval including Utt-T as its final subinterval (right bound) and stretching indefinitely into the past. Correspondingly, theories of the Perfect that make use of the Perfect Time Span are known as “Extended-now”-theories. The main advantage of such theories is that of providing an account for the distribution of existential and universal readings by appealing to the difference between bounded situations (which end up included in the Perfect
(5)  a. Since 2000, Alexandra has been living in LA.
    b. Petros has been sick for the past two weeks.

Universal readings of Present Perfects are defined by the fact that the situation/event described in the sentence starts at some time before Utt-T, and still holds at Utt-T and possibly thereafter. The PRES-PERF obligatorily exhibits this defining characteristic of universal readings. Thus, for instance, (6a) is only acceptable if uttered during the school term, but not afterwards, (6b) is only acceptable if uttered during the winter in question, but not afterwards, and (6c) requires that not all movie theaters of the type in question have disappeared at Utt-T, i.e. that the process may continue after Utt-T.\(^7\)

(6)  a. Você tem feito seus deveres de casa?
    you havePR.2SG do.PP your homework
    ‘Have you done/been doing your homework regularly?’
    b. Pedro tem dormido na varanda o inverno inteiro.
    Pedro has sleep.PP in-the balcony the winter whole
    ‘Pedro has been sleeping on the balcony all this winter.’
    c. Esse tipo de cinema tem desaparecido na cidade a toda velocidade.
    This type of cinema has disappear.PP in+the town to all speed
    ‘Movie-theaters of the kind have been rapidly disappearing from town.’

However, as we will show below, the distribution of the PRES-PERF differs from Universal Present Perfects in other languages with respect to three properties: (i) adverbial modification, (ii) compatibility with stage-level states, and (iii) negation + adverbs corresponding to yet. Firstly, in English and in other languages, universal readings only arise in the context of certain interval or measure adverbials (Mittwoch, 1988). They are possible with since X and for X time adverbials, but it has been observed that such sentences always admit other, non-universal readings (7b). Only sentences containing

\(^7\)Contrary to the data reported for the variety of Brazilian Portuguese discussed in Molsing (2007), the implication that the process continues beyond Utt-T cannot be cancelled. The following example is completely unacceptable for our consultants:

(i) # Eu tenho visitado meus pais, mais não vou mais.
    I have.PR.1SG visit.PP my parents but NEG go.PR.1SG more
    ‘I have been visiting my parents but I don’t anymore.’ Molsing (2007, example 21b)
adverbials such as *at least since X, ever since X, always and for X time now* unambiguously give rise to universal readings (7c) (Iatridou et al., 2001):

(7) a. Peter has been in Boston. [non-universal]
    b. Peter has been in Boston since Tuesday.
       Peter has been in Boston for two months. [ambiguous]
    c. Peter has been in Boston at least since Tuesday/ for two months now. [universal]

By contrast, as shown by the examples (6a) and (6c), universal readings systematically arise for the PRES-PRF in the absence of any interval or measure adverbials. The first peculiarity of the PRES-PRF is that of consistently exhibiting universal readings in any context.

This does not mean, however, that the PRES-PRF is simply a perfect that is specialised for universal readings.\(^8\) If it is a universal perfect, it is a peculiarly restricted instance of a universal perfect. Universal readings are known to require “homogeneous” situation descriptions (statives, habituals) and to be incompatible with perfective or bounded aspect. This requirement is reflected, in English, by a general preference for progressive (*has been singing*) over simple forms (*has sung*) in the case of non-statives and non-habituals. Due to this property, universal readings have been analysed as the result of embedding a homogeneous eventuality description or, correspondingly, an instance of [UNBOUNDED] [IMPERFECTIVE] aspect under a Perfect operator (Iatridou et al. 2001, Pancheva 2003).

The PRES-PRF discussed here is particularly restricted in that it excludes certain types of homogeneous situations. In fact, the form lacks some of the most typical uses of Universal perfects, namely with stage-level states.

Stage-level states are homogeneous situations, and as such they should pose no problem for a Universal perfect. However, stage-level predications with the copula *estar* are only felicitous in the PRES-PRF in a restricted number of cases:

---

\(^8\)It should be stressed that other Brazilian varieties might not exhibit the same restrictions. Thus, the variety described by Ilari (2001) seems to correspond quite neatly to a universal perfect, inasmuch as it can give rise to continuative readings with durative and atelic event descriptions. Furthermore, Squartini (1998, 158) asserts that the relevant factor for the felicitousness of the Portuguese Present Perfect is durativity, a requirement that “can be fulfilled either by means of a single durative situation or by iteration”. Ilari (2001) reports on two contrasting characterizations of the Present Perfect by scholars writing in the 19th and early 20th century, the first stressing repetition, the second duration. It is likely that the polemic regarding the adequate characterization is actually based on intuitions from diverging varieties. Throughout the paper, we will mention the relevant differences with other Brazilian varieties we have been able to test.
We will come back to these examples in section 4.4. Let us simply note at this point that the generalisation emerging from them is that only gradable states are acceptable with the Pres-Perf.

Furthermore, the Pres-Perf is not felicitous in a context that is usually analysed as an instance of the Universal reading, namely negation of the occurrence of an event whose occurrence is still expected, as signalled by adverbs like yet. In such contexts, the English Present Perfect is required, but the Pres-Perf is impossible:

(9)  a. She hasn’t arrived yet.
    b. # Ela ainda não tem chegado [ok chegou]
       she still not has arrive.pp [arrive.pf.3sg]

Note that (8b) is excluded in all varieties of Portuguese.\(^9\) It is not clear to us, however, that this context actually exemplifies a Universal reading. Negation

\(^9\)This property distinguishes Portuguese from some very restrictive varieties of American Spanish (for instance, Rio de la Plata), which are also classified as Stage II-Present Perfects (Squatirini and Bertinetto, 2000). The perfect in these varieties of Spanish shares a number of properties with the Pres-Perf (no recent anteriority readings, most single-event readings are unfelicitous), but can occur with negated events whenever the occurrence of the event is still expected. Thus, (ia) contrasts with (ib) in that the speaker necessarily believes that s/he might still arrive in the case of (ia):

(8)  a. # Esse livro sempre tem estado na prateleira da direita.
      This book always has be.pp in+the shelf of+the right
      ‘This book has always been on the right-hand shelf.’
        b. # Essa loja tem estado fechada (ultimamente).
           This shop has be.pp closed (lately)
           ‘This shop has been closed for some time.’
        c. # Pedro tem estado no jardim/ nos Estados Unidos.
           Pedro has be.pp in+the garden/in+the US
           ‘Pedro has been in the garden/in the US.’
        d. Pedro tem estado muito doente nos últimos tempos.
           Pedro has be.pp very ill in+the last times
           ‘Pedro has been very ill lately.’
        e. Pedro tem estado bêbado / aborrecido.
           Pedro has be.pp drunk / upset
           ‘Pedro has been drunk / upset.’
of the occurrence of an event is sometimes assumed to give rise to a homogeneous state. But, on the other hand, the interaction of negation with quantifiers is such that asserting for all times in an interval that a predicate does not hold is logically equivalent to asserting that the predicate holds for no time in that interval. In view of the logical equivalence in (10), the context in question can be analysed both as a Universal and as an Existential Perfect:

\[
\forall t \subseteq PTS: \neg P(t) \iff \neg \exists t \subseteq PTS: P(t)
\]

In any case, as will be shown in the following section, homogeneity is not a sufficient condition for felicitous use of the PRES-PERF: Discontinuity and a certain length of the Perfect Time Span are further requirements on felicitous use of this form.

4.2.4 **Iteration, temporal gaps and length of the interval**

Existing descriptions of Portuguese insist on the fact that the Present Perfect forces – at least in the case of situations other than stage-level states - some sort of iteration (Schmitt 2001, Amaral & Howe 2004). Two questions arise here: (i) what counts exactly as iteration of an event type, as opposed to occurrence of a single event? and (ii) is iteration a sufficient condition for felicitous use?

**The temporal gap requirement**

A comparison with the English Present Perfect Progressive may help understand the options at stake. Recall that the English Present Perfect Progressive is easily interpreted as a Universal Perfect; also, like the PRES-PERF it is incompatible with negated events in yet-contexts and with stage-level states:

\[
(11) \quad \begin{align*}
&\text{a. } \ast \text{She hasn’t been arriving yet.} \\
&\text{b. } \ast \text{This book has been being on the right-hand shelf.}
\end{align*}
\]

In Universal readings of the English Present Perfect Progressive, the homogeneous eventuality whose temporal trace includes the Perfect Time Span may be a single, protracted event (continuative 12a) or an iteration of events (frequentative 12b, habitual 12c), possibly associated with a monotonic function whose values increase along a scale at successive intervals in time (incremental 12d):

\[
(12) \quad \begin{align*}
&\text{a. } \text{Mary has been singing for some time. [CONTINUATIVE]} \\
&\text{b. } \text{Mary has been calling you since this morning. [FREQUENTATIVE]} \\
&\text{c. } \text{Mary has been dining out a lot lately. [HABITUAL]} \\
&\text{d. } \text{Oil prices have been rising for some time. [INCREMENTAL]}
\end{align*}
\]
Continuative and incremental readings are held to instantiate a particular flavour of pluractionality (cf. Van Geenhoven 2005, Tovena and Donazzan 2008), since they certainly involve more than one subinterval of validity for the event predicate. However, the distribution of the PRES-PERF indicates that the iteration requirement is stronger in this case: felicitous use of the PRES-PERF requires a series of distinct instantiations of the same event type. This condition can only be fulfilled by separation through temporal gaps whenever the basic event description is neither punctual nor telic. Given the S-cumulativity of activities and ‘degree achievements’, any two temporally adjacent instances of such event types which share the same participants will count as single instance of a “larger” event of the same type (see Rothstein 2004).

The requirement of distinct instantiations is particularly clear in the acceptability contrast our informant finds between (13a) and (13b):

(13) a. Pedro tem dormido na varanda o inverno inteiro.  
Pedro has sleep.PP in-the balcony the winter whole  
‘Pedro has been sleeping on the balcony all winter.’

b. #O urso tem dormido na sua caverna o inverno inteiro.  
the bear has sleep.PP in-the his cave the winter whole  
‘The bear has been sleeping in his cave all winter.’

Given what we know about the hibernating habits of bears, (13b) is taken to report a single, protracted sleeping event (continuative), whereas the felicitous (13a) involves an iteration of disjoint sleeping events (frequenta-tive/habitual). We conclude that the PRES-PERF in the variety we examine does not allow continuative readings.

The requirement of temporal gaps as a means of ensuring distinct instantiations of an event-type is further substantiated by an analogous contrast concerning incremental readings. For our informant, examples involving a continuous function, as (14b), are degraded in comparison with examples in which the increase involves discrete values of the function for sufficiently distant times (14a):\(^{10}\)

(14) a. Desde os anos 80, o número de estudantes tem aumentado.  
since the years 80 the number of students has increase.PP  
‘The number of students has been increasing since the eighties.’

---

\(^{10}\)There is dialectal variation concerning both the judgements for states and the requirement of discontinuity. Thus, in the variety described by Amaral & Howe (2004), all stage-level states are admissible and give rise to continuative or iterative readings. Other consultants from Brazil, while sharing the judgements in (8a-e) see no acceptability contrasts in (13a-b) or (14a-b). Note, furthermore, that the distribution in (8) is reminiscent of the contrast between ?The shop keeps being open and John keeps being ill./depressed.
b. ?? O nível do rio tem aumentado muito nos últimos anos.
   'The water level has risen a lot these past years.'

In (14a), the increase in the number of students involves discrete numerical values at the beginning of each school term, whereas the increase in the level of water in (14b) is more naturally conceived of as a continuous function.

**Conditions on the length of the interval**

Temporal gaps are required with S-cumulative predicates in order to ensure distinct event instantiations. Since punctual or telic events are naturally atomic, and therefore not S-cumulative, they never give rise to continuous readings, but only to frequentative or habitual interpretations. However, the inacceptability of (15a-c) shows that iteration of distinct events is not a sufficient condition for the felicity of the PRES-PERF.

(15) a. # Eu tenho feito as camas desde as oito da manhã.
   'I have been making the beds since 8 o'clock in the morning.'

b. # Ela tem perguntado por você toda a manhã.
   'She's been asking for you the whole morning.'

c. # Maria tem tossido muito desde ontem.
   'Mary has been coughing a lot since yesterday.'

According to the explanation provided by our consultants, the interval given by the adverbial in these examples is considered too short for use of the PRES-PERF. This raises a number of questions, since – as far as we can tell – there is only one sort of aspercual value which is actually sensitive to the relative length of the interval, namely habitual aspect (Kleiber 1987, Boneh and Doron 2008).

Further support for the relevance of the length of the interval derives from the following observation: the interval adverbials that are by far the most compatible with the PRES-PERF are expressions like *últimamente* ‘lately’, *nos últimos tempos / anos / meses* ‘recently, these last years/ months’. Such adverbials denote intervals stretching back some distance from Utt-T into the past, and thus contribute a protracted Perfect Time Span. In fact, in contexts in
which these adverbials are not felicitous, infelicity derives from an impression of redundancy: the PRES-PERF is felt to specify such an interval by itself.

To summarise, the PRES-PERF, by contrast with the other tenses and moods of the construction ter ‘have’ + PP, entirely lacks resultative or anteriority readings, and consistently behaves like a Universal perfect of a particularly restricted kind. It requires that the interval stretching from Utt-T to some point in the past not be a homogeneous interval of validity for the basic eventuality description, i.e. that it not be “filled” by the temporal trace of a single event – and thus excludes continuative readings. Discontinuity and distribution of the eventuality over a sufficiently long interval are necessary conditions for felicitous use of the PRES-PERF.

4.3 The analysis

4.3.1 The PRES-PERF operator

From the data discussed in the previous section, it emerges that any analysis of the PRES-PERF has to account for two properties:

(i) the location of the eventuality described by the v/VP (verb plus arguments plus internal adjuncts) in a sentence in the PRES-PERF. The left boundary (LB) of the temporal trace of this description precedes the highest anchor (Utt-T) and its right boundary (RB) cannot strictly precede it, but must rather (as shown by examples such as (6a-c) above), follow it.

(ii) the internal structure of the interval, which is characterised by a discontinuous, but regular distribution of the type of event denoted by the basic verb throughout the whole interval.

Schematically represented, the configuration we need to capture is the following (we represent as V-intervals the intervals of which the basic eventuality description holds):

\[
\text{[LB } V \_ \_ V \_ \_ V \_ \_ V \_ \_ V \_ \_ V \_ \_ V \_ \_ V \_ \_ V \_ \_ V \_ \_ ]_{RB}
\]

The bundling together of these two properties poses a major analytical problem for current approaches to tense and aspect: whereas the first property involves ordering relations between intervals that can be captured by time-relational approaches to aspect, the second property concerns the temporal structure of the described eventuality, and thus falls into the realm of eventuality modification. Note that the problem would subsist even under the wholesale adoption of interval semantics (which would mean going back to treating
eventuality descriptions not as predicates of events, but as predicates of intervals, as proposed in Van Geenhoven (2004)): relative location of an interval still remains quite distinct from the distribution of a temporal property over this interval.\footnote{An analogous problem arises in the analysis of the manifestations of habitual aspect, if it is indeed the case that habitual aspect is associated with imperfectivity, since the latter requires that the interval of evaluation be included in the interval of which the eventuality holds.} Furthermore, the time-relational problem would not disappear by eliminating Utt-T as highest anchor (something contributed by present tense on the auxiliary): we would still need to say that there is an interval (the Perfect Time Span) which is properly included in another interval with a particular temporal structure.

In fact, we adopt here the time-relational theory of aspect (Smith 1991, Klein 1995, Demirdache and Uribe-Extebarria 2000), which – following Reichenbach’s original intuitions – presupposes that we never have a direct relation between the time of the eventuality (Ev-T) and the highest anchor (normally Utt-T in root contexts), but that this relationship is always mediated by an interval of evaluation, Ast-T (a direct descendant of Reichenbach’s “reference point”). In the case under discussion, Ast-T corresponds to the Perfect Time Span. Accordingly, the configuration in (16) should be modified as in (17):

\[(17) \quad Ut-T \quad |
\begin{array}{c}
\overbrace{\_[V_\_V_\_V_\_V_\_V_\_V_\_\_\_]} \quad Ast-T = \text{Perfect Time Span} \\
Ev-T
\end{array}
\]

We propose that the \textsc{Pres-Perf} introduces an operator that applies to \textsc{VP} and has the following definition:

\[(18) \quad \lambda P \exists i \exists E i \subset \tau(E) \& RB(\tau(E)) \not\in i \& RB(i) = Ut-T \& P(E) \\
\& i \text{ is of a certain length} \\
\& \exists e, e' \in E \& e' \in E \& e \neq e' \\
\& \forall e, e' \in E \nexists \tau(e) \cap \tau(e') \\
\& V(e) \& V(e') \& \text{card } (e \oplus e') > 1 \footnote{Notice that we distinguish between }\]

The conjuncts in the first line of the above definition constitute the assertion contributed by the \textsc{Pres-Perf}: they correspond to a deictic Extended-now interval (i) which is properly included in the temporal trace of a set of events (E) of the type described by the v/\textsc{VP} (P). The underlined conjuncts in the
following lines constitute presuppositions (felicity conditions) for use of the \textsc{pres-perf}.

The first conjunct of the presupposition forces a sufficiently long interval (see section 4.2.4). The conditions in the second and third lines of the presupposition capture the pluractional-like properties of the \textsc{pres-perf}: there is a plurality of events of the type described by the verb, and the temporal traces of different events do not overlap. The conjuncts in the last line of the presupposition are intended to capture the felicity condition holding in varieties which, as the one we describe, do not admit continuative readings. It amounts to a ban on the possibility for the sum of events to count as a singular event.

Due to \textsc{S-cumulativity}, the sum of two temporally adjacent events with the same participants will count as a singular event in the case of activity and degree achievement predicates, which are not naturally atomic. The discontinuity requirement discussed in the previous section – the requirement of temporal gaps – is a way of ensuring a plurality of distinct events. As we will see below, plural arguments are another way of obtaining the same result.

It is significant that for our consultant accomplishments with singular objects like \textit{read a book}, \textit{paint his house}, cannot appear with the \textsc{pres-perf}, even though an interpretation involving temporal gaps, namely an intermittent interpretation, is in principle available. Accomplishments with singular objects give rise to “intermittent” or “on an off/ from time to time”-readings (see Amaral and Howe 2004) when in the \textsc{pres-perf} precisely in those varieties which also admit continuative readings. We surmise that the naturally atomic nature of accomplishments with singular objects prevents the separate subevents involved in intermittent readings from counting as “more than one” event.

In what follows we will give supporting evidence for the proposed analysis.

4.3.2 Pluractional characteristics of the \textsc{pres-perf}

As we have seen, the felicitous use of the \textsc{pres-perf} requires that a derived, plural eventuality description\textsuperscript{13} holds throughout the Perfect Time Span. This gives rise to a discontinuous temporal structure: for \textsc{S-cumulative} eventuality descriptions, the basic eventuality description should not hold at all subintervals of the Perfect Time Span. This sort of restriction is typical for some bona fide temporal pluractionals, such as described by Van Geenhoven (2004, 2005). Our analysis of the \textsc{pres-perf} including a pluractional component is supported by the fact that the \textsc{pres-perf} also shares other properties of temporal pluractionals: its interaction with nominal arguments and with some adverbials replicates well-known properties of temporal pluractionals.

\textsuperscript{13}For the notion of ‘derived situation type’, which subsumes iteratives, frequentatives and habituals, see Smith (1991).
Interaction with nominal arguments

First of all, though inducing a plurality of events, the PRES-PERF never gives rise to multiplication effects on singular indefinite arguments. Thus, (19a) is infelicitous for the very same reasons that render the pluractionals exemplified in (19b) and (19c) deviant: the same apple cannot be eaten more than once, just as the same bomb cannot explode more than once or the same shot be fired more than once.

(19) a. # Tenho comido uma maçã.  
   have.PRES eat.PP an apple  
   ‘#I have eaten an apple.’

b. # Qaartartoq sivisuumik qaaqattaarpoq  
   qaartartuq sivisuu-mik qaar-qattaaar-puq  
   bomb.ABS lengthy.INS explode-QUATTAR-IND.[-tr].3SG  
   ‘#A/the bomb exploded again and again for a long time.’  
   (Van Geenhoven, 2004, example (30))

c. # Juan anduvo disparando un tiro.  
   Juan walk.PF.3SG shoot.GER a shot  
   ‘#Juan has been firing a shot.’ (Laca 2006)

Expressions introducing a pluractional verbal operator, such as the West-Greenlandic affix in (19b) or the Spanish frequentative periphrasis in (19c), are characterised by the fact that they cannot take scope over an indefinite argument. As (19a) shows, the PRES-PERF shares this property.

Pluractionals have a second characteristic pattern of interaction with their nominal arguments: they can establish distributive correspondences with some plural nominal arguments, most notably with bare plurals. Examples that are judged deviant with singular arguments become acceptable with plural arguments which allow the association of distinct subevents with different ‘parts’ of a plural participant. Thus, the deviant examples (19a-c) all become acceptable if the singular indefinite is substituted by a bare plural:

(20) a. Tenho comido maçãs.  
   have.PRES eat.PP apples  
   ‘I have been eating apples.’

b. Qaartartut sivisuumik qaaqattaarpoq  
   qaartartut sivisuu-mik qaar-qattaaar-puq  
   bomb.ABS.PL lengthy.INS explode-QUATTAR-IND.[-tr]3SG(sic!)  
   ‘Bombs exploded again and again for a long time.’  
   (Van Geenhoven, 2004, example (30))

c. Juan anduvo disparando tiros.  
   Juan walk.PF.3SG shoot.GER shots  
   ‘Juan has been firing shots.’ (Laca 2006)
Distributive correspondences of this sort can be also established with nominals introduced by cumulative degree quantifiers such as *a lot of*, and even with definite plurals and universally quantified arguments (see (28cb) below); in contrast, cardinalised, quantised expressions, block them, as shown by the contrasts in (21a-b):

(21) a. Muitas / # Vinte pessoas têm morrido no Iraque.  
    many / twenty people have.PR3PL die.PP in+the Iraq  
    ‘A lot of / #twenty people have been dying in Iraq.’

b. Muitos / # Vinte estudantes têm aderido ao Partido Communista.  
    many / twenty students have.PR3PL join.PP to+the Party Communist  
    ‘A lot of / #twenty students have been joining the Communist Party.’

This incompatibility with cardinalised expressions can be related to a condition on the output of pluractional operators independently described by Van Geenhoven (2004) and Yu (2003): a pluractional denotes an unbounded plurality of events, whereas a cardinalised argument contributes boundedness. Note that, since dying and joining the Communist Party are once-only events, only a distributive correspondence over parts of a plural participant can ensure a multiplicity of distinct events in cases such as (21a-b). But then, the cardinalised argument would count the events in the plurality, an option that is not open to pluractionals, as we will see in section 4.3.3 below.

Interestingly though, the English Perfect Progressive exhibits the same sort of cardinality restriction in these contexts, as shown by the acceptability contrasts in the translations. Since the English Perfect Progressive is not necessarily Universal (see Mittwoch 1988), the cardinality restriction that guarantees unboundedness cannot be simply motivated by the unboundedness requirement defining Universal readings.

4.3.3 Interaction with adverbials

The unboundedness requirement on pluractionals further extends to the interaction of pluractionals with adverbials indicating repetition. As shown by Yu (2003) for Chechen pluractionals, and by Laca (2006) for Spanish, adverbials indicating repetition can never specify the cardinality of the set of events associated with the pluractional. The same holds of the PRES-PERF, which can be combined with degree adverbials such as *muito* ‘a lot’, *pouco* ‘little’, *muitas vezes* “many times”, but not with cardinalised time-adverbials, such as *‘n times’*:
(22) a. Eu tenho visto muito /??muitas vezes a sua irmã lately
   ‘I’ve been seeing your sister a lot/ ?many times lately.’
b. # Eu tenho visto três/ várias vezes a sua irmã lately
   #‘I’ve been seeing your sister three/ several times lately.’
c. # Eu tenho dito milhões de vezes pra não fazer isso. lately
   #‘I’ve been telling you millions of times not to do this.’

In the case of pluractionals, Van Geenhoven (2004, 2005) attributes both
the ban on cardinal adverbials and the ban on cardinalised arguments to a
cumulativity requirement. Note, however, that it is not cumulativity that is
at stake here (semantically, a little is not cumulative, by contrast with a lot,
whereas several or millions of times are strictly speaking cumulative), but the
difference between degree quantification and cardinalization. In the case of
degree quantification the structure of the denotation domain need not be natu-
really atomic, while cardinal expressions require an atomic structure. The ban
on cardinal adverbials replicates a property sometimes attributed to plurac-
tionals, that of producing an output that denotes in a mass-like domain (Yu,
2003). In this, the temporal structure associated with the PRES-PERF closely
parallels the Spanish frequentative and incremental periphrases described by
Laca (2006), which are the equivalent in the verbal domain of collective mass
nouns (e.g. furniture) in the nominal domain. Like collective mass nouns,
such eventuality descriptions comprise a plurality of atoms, but the atoms,
though conceptually available, are neither accessible to counting, nor do they
give rise to the multiplication effects on non-referential co-arguments associ-
ated with distributive readings.

For the sake of completeness, note that the PRES-PERF combines easily
with time adverbials like cyclic quantified expressions (every day) and dis-
tributive expressions (once a week), but rejects frequency adverbs to the pos-
sible exception of sempre ‘always’:

(23) a. Tenho visto (a) sua irmã todo dia.
   have.PR.1SG see.PP the your sister every day
   ‘I have been seeing your sister every day.’
b. Ela tem ligado uma vez por semana.
   she has phone.PP one time by week
   ‘She’s been phoning once a week.’

c. # Geralmente / #Na maior parte do tempo tenho
   usually / in+the most part of+the time have.PP.1SG
   visto a sua irmã na escola.
   see.PP the your sister at school
   ? ‘Usually/ Most of the time I’ve been seeing your sister at school.’

Frequency adverbials are quantificational elements introducing tripartite quantificational structures which depend on an atomic level for establishing correspondences between events/situations. Their incompatibility with the Pres-Perf is yet another indication that the temporal structure at stake lacks “visible” atoms.\(^\text{14}\)

To sum up, the Pres-Perf exhibits a number of properties which characterize pluractionals, over and above the iteration readings it gives rise to. Like pluractionals, it has no multiplication effects on indefinite arguments which could be attributed to an operator scoping over the arguments, but it establishes distributive correspondences between subevents and parts of plural participants. As it is the case with pluractionals, the associated event plurality cannot be cardinalised, and the distribution with other adverbs points to the lack of a semantically accessible level of atomic subevents. As we will see below, there is however a major difference between pluractional aspectual operators and the Pres-Perf: whereas the former assert pluractionality, the Pres-Perf presupposes it as a felicity condition. This presupposition can be accommodated in a number of contexts, but not in all of them.

### 4.4 Stage-level states, discontinuity, and the Pres-Perf

We suggested above that discontinuity in the distribution of the basic eventuality description is a necessary condition for the use of the Pres-Perf, and that this raises the question as to what counts as a multiplicity of events of the same type by contrast with the occurrence of a single protracted event. In this section, we take a closer look at the temporal structure associated with the Pres-Perf by examining the distribution of the Pres-Perf with states.

#### 4.4.1 Stage level states and the Pres-Perf

Some examples seem to disconfirm the discontinuity requirement and the claim that the Pres-Perf lacks continuative readings. As we have seen in

\(^{14}\)The particular behaviour of sempre ‘always’ is justified by the fact that adverbs with this meaning seem to be ambiguous between a quantificational, distributive reading (always...when, whenever) and a collective-like reading (all the time).
section 4.2, some stage-level states are acceptable in the PRES-PERF in the absence of temporal gaps between successive instantiations of the state that could warrant discontinuity, and therefore, multiplicity of instantiations (see 8d-e).

Our consultant admits stage-level predicates such as *deprimido* ‘depressed’, *bébado* ‘drunk’, *doente* ‘ill’, *aborrecido* ‘upset’ in such contexts, though preferring in some cases the copula *andar* to the copula *estar*, but she categorically rejects predicates like *vázio* ‘empty’, *fechado* ‘closed’, as well as locative predicates like “on the top shelf”, “in the garden”:

(24) a. Como tenho estado / andado deprimida ultimamente, as have.PRES.1SG be.PP / walk.PP depressed lately
   ler o seu texto me fez bem.
   read.INF the your text me do.PF.3SG well.
   ‘Since I have been depressed lately, it was good for me to read your text.’

   b. # Paulo tem estado no jardim.
   Paulo has be.PP in+the garden
   ‘Paulo has been in the garden (for some time).’

   c. # Essa loja tem estado fechada (ultimamente).
   this shop has been close.PP (lately)
   ‘This shop has been closed for some time.’

Upon closer inspection, this contrast between two types of stage-level states actually supports the discontinuity requirement.

States are normally defined as totally homogeneous properties, which are identical to themselves at all instants of validity. As a consequence, they can be evaluated at a single instant, and they have the subinterval property all the way down to minimal subintervals (Dowty 1979, Rothstein 2004). This definition, however, ignores a relevant difference between gradable and simply yes/no properties. To be on the top shelf for a book, or to be closed for a shop, are yes/no properties, and there can be no differences between two intervals of which the property holds. But one is depressed, drunk or upset to different degrees, so that there is no total homogeneity for the intervals of which the property holds. In fact, we can obtain discontinuity for any degree predicate if the property is set to different arbitrary “thresholds” at different times (see Dowty 1979, Kamp 1975 on degree predicates).15

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15 The particular behaviour of gradable states could also be linked to their being “inchoative states”, similar to activities in having initial points in their lexical representation, as suggested by Bar-el (2007) for Squamish. This issue should be explored further, though a decision as to the determining role of gradability or “inchoativity” will have to await clearer cut criteria for the existence of initial points.
This conclusion is consistent with the fact that, though accepting *estar*, our consultant clearly prefers the copula *andar* ‘walk’ in this type of examples: as a copula, *andar* expresses intermittency in the manifestation of the property. This preference is shared by all speakers who reject continuative readings for the PRES-PERF.

### 4.4.2 Aspectual periphrases and the PRES-PERF

The behaviour of the PRES-PERF with aspectual periphrases provides strong support for the requirement of temporal gaps as a means of ensuring discrimination of distinct instantiations of the same event type. Our consultant’s intuitions are particularly clear-cut on this point, and they differ significantly from those of speakers of other varieties of Portuguese (see for instance Schmitt 2001).

Brazilian Portuguese has several periphrases in which the main predicate appears in the gerundial form (corresponding roughly to *a + Infinitive* in European Portuguese). Among these periphrases, *estar* + Gerund closely corresponds to the English progressive (see King and Suñer 1980), *ir* + Gerund is an expression for incremental temporal structures (gradual or successive aspect), *andar* + Gerund is an expression for a frequentative and/or habitual temporal structure, and *viver* + Gerund is an expression for an habitual and continuous temporal structure, roughly conveying the meaning of a non-stop insistence on a certain behaviour (comparable to that of the English progressive in combination with *always, forever*) (see Campos 1980).

   *this kid LOC-be.PR.3SG do.GER nonsense*
   ‘This kid is doing nonsense.’

b. A gente vai vivendo como pode.
   *the people go.PR.3SG live.GER as can.PR.3SG*
   ‘We go on living as well we can.’

c. Esse menino anda fazendo besteira.
   *this kid walk.PR.3SG do.GER nonsense*
   ‘This kid is doing nonsense.’

d. Esse menino vive fazendo besteira.
   *this kid live.PR.3SG do.GER nonsense*
   ‘This kid is always doing nonsense.’

Crucially, the PRES-PERF is only compatible with the frequentative/habitual *andar* + Gerund:
(26) a. * Esse menino tem estado fazendo besteira.
   this kid has be.PP do.GER nonsense
b. * Esse menino tem ido melhorando.
   this kid has go.PP improve.GER
c. Esse menino tem andado fazendo besteira.
   this kid has walk.PP do.GER nonsense
d. * Esse menino tem vivido fazendo besteira.
   this kid has live.PP do.GER nonsense

Now, out of all the four periphrases, *andar + Gerund is the only one that ensures discontinuity of the distribution of basic eventuality description throughout the interval, since it always conveys that the eventuality is instantiated intermittently (see Laca 2006, 2009 for Spanish). The progressive, the incremental and the continuous habitual are all compatible with a continuous distribution of the basic eventuality description over the interval, and the two latter ones might even presuppose it, at least at the relevant level of granularity.

Summarising we may say that the fact that the PRES-PERF, in the absence of temporal gaps, only admits gradable stage-level states actually provides indirect confirmation for the discontinuity requirement proposed here. The slight preference for the copula *andar in these contexts further supports this interpretation: as a copula, *andar conveys the same sense of intermittency or discontinuity that characterizes its uses as a modifier verb in the periphrasis *andar + Gerund.

4.4.3 Accomplishments with singular arguments

In our proposal, the PRES-PERF presupposes a plurality of events as a felicity condition. In the variety we describe, which is characterised by the lack of continuative readings, this presupposition is easily accommodated in the case of punctual events and of activities. Both are understood as iterated, with temporal gaps necessarily discriminating different instantiations in the case of activities.

(27) a. Tenho visto a sua irmã na escola.
    have.PR.1SG see.PP the your sister at school
    ‘I’ve been seeing your sister at school.’

b. Tenho viajado muito nos últimos tempos.
    have.PR.1SG travel.PP much in+the last times.
    ‘I’ve been travelling a lot lately.’

Accomplishments with singular objects show a particular behaviour: in such cases, the PRES-PERF is consistently rejected, even when the described
event can affect the same object more than once. By contrast, plural arguments – also quantified or definite ones, as in (28c) – are acceptable:

(28)  

(a) # O João tem lido esse livro.  
the João has read PP this book  
‘João has been reading this book.’\(^{16}\)

(b) Ele tem lido alguns textos e pensa voltar ao teatro.  
he has read PP some texts and thinks return to+the theater  
‘He’s been reading some texts and is thinking of coming back to the theater.’

(c) João tem lido tudo que o professor indica/ os livros de P. Freire.  
João has read PP all that the professor recommends/ the books of P. Freire.  
‘João has been reading everything the teacher recommends/ the books by P. Freire.’

As suggested above, an intermittent reading for (28a) is excluded in the variety we describe because it would not fulfill the requirement that the cardinality of the sum of events be greater than one. In principle, however, nothing should prevent an accomplishment description, as that in (28a), from denoting a plurality of complete event instantiations. The behaviour of accomplishments with singular arguments is puzzling, if we compare them with achievements, which can easily give rise to iterative interpretations. But this puzzling behaviour surfaces quite generally in other contexts requiring pluralities of events.

In fact, the impossibility of accommodating the presupposition of plurality in (28a) clearly parallels a constraint affecting “bare” habitual sentences (those without explicit restrictors or quantifying adverbials). Habitual sentences require a plurality of events. In English and in other languages, bare habitual sentences are possible with achievements (29a), and tolerate singular arguments in the case of activities (29b), but not in the case of accomplishments (29c):

(29)  

(a) John arrives late.  
(b) John drives a truck.  
(c) #John reads a novel.

\(^{16}\)In the variety described by Amaral and Howe (2004) this example is felicitous, and gives rise to two readings, one involving repetition of the event (including its culmination point), as in John has been reading this book over and over, the other involving intermittency, as in John has been reading this book on and off. For those of our consultants that accept continuative readings, the second interpretation is possible, but not the first one.
In a recent account of the ban against habitual readings for sentences like (29c), de Swart (2006) suggests that the atomic nature of the singular argument – even if its reference remains undetermined, as is the case with indefinites – maps an atomic individual to the domain of events, and that this mapping creates a singular event. The dependent-plural interpretation which, according to de Swart, accounts for the acceptability of bare habitals with non-cardinalised plural objects (*John reads novels/lots of novels*) closely parallels the distributive correspondences between events and plural arguments that ensure the necessary plurality of events in examples (28b-c).

4.4.4 Habituality, frequentativity and the PRES-PERF

As we have seen above, the PRES-PERF presupposes a plurality of events. The PRES-PERF has to be applied to a recurring event, and different events have to be discrete in that temporal gaps are needed between instances of the event (or peaks of the s-level state). Furthermore, we have seen that the Pres-perf can only be used felicitously if the interval is sufficiently long (section 4.2.4). Given these two properties, the PRES-PERF shares properties with frequentatives and with habitals alike.

Frequentatives and habitals can be distinguished in several ways. First, frequentatives can be used with short intervals that do not warrant the inference of a habit or a regularity. Secondly, frequentatives simply report regular recurrence characterizing an interval (accidental generalizations) while habitals report non-accidental generalizations (see the literature on generics, and recently Mendéndez Benito 2002). Since the pattern of repetition described by the PRES-PERF continues beyond Utt-T, it relies on a non-accidental generalization, and therefore the PRES-PERF patterns on a par with habitals, rather than with simple frequentatives.

Habitals do not form a homogeneous class, however, since two clearly different types have to be distinguished: quantificational and dispositional generics. The latter are clearly modal and do not require instantiations, while the former require an instantiation of the event-type:

(30) a. Peter used to handle the mail from Antarctica. (quantificational) (mail from Antarctica required)

     b. Peter handled the mail from Antarctica. (dispositional) (no mail from Antarctica required)

The PRES-PERF patterns with the quantificational habitals in that it clearly requires instantiations of the described event.

The difference between the two types of habitals has been analysed as a difference between a modal operator (dispositional) and a habitual quantificational frequency adverb (quantificational habitals, see Krifka et al. 1995). This analysis in terms of a silent Q-adverb is problematic, however, since Q-
adverbs – unlike bare habituals – license indefinite singular objects (see 31, Carlson 1977, Kleiber 1987) and dependent expressions of identity (see 32, Laca and Tasmowski 2001):

(31)   a. # John repairs a bicycle.
   b. John often repairs a bicycle.

(32)   a. Imelda Marcos ne porte jamais la même paire de chaussures.
   ‘Imelda Marcos never wears the same pair of shoes.’
   b. # Imelda Marcos ne porte pas la même paire de chaussures.
   ‘Imelda Marcos does not wear the same pair of shoes.’

Recently, Boneh and Doron (2008) have proposed an alternative analysis, relying on a modal habitual operator HAB_MOD modifying the VP for dispositional habituals and on an aspectual habitual operator HAB_ASP in AspP for quantificational habituals.

(33) \( \text{Hab}_{\text{ASP}} > \lambda P \lambda w \lambda i \left[ \left| i \right| > Lc,P \& i = \mathbb{C} \{ i : \text{FOR} (P, w, i) \} \right] \)

\( Lc,P = \text{contextually long interval for the property } P \)

\( \text{FOR} = \lambda P \lambda w \lambda i \exists e \left[ \text{ITER}(P, e, w) \& i = \mathbb{C} \{ \tau (e') : P(e', w) \& e' \subset e \} \right] \)

\( \text{ITER} = \lambda P \lambda w \lambda e [P(e, w) \& e = \sigma e' [P(e', w) \& e' \subset e]] \)

(Boneh and Doron, 2008)

Following this analysis of quantificational habituals as iterations over a contextually long interval proposed, our definition of the PRES-PERF operator includes a presupposition requiring the interval of assertion to be sufficiently long, where length of the interval is contextually determined.

The PRES-PERF described here differs from the aspectual habitual operator proposed by Boneh and Doron (2008) in two respects: (i) the PRES-PERF only presupposes a plurality of events and does not assert it, and (ii) the PRES-PERF has to be applied to a recurring event, and different events have to be discrete in that temporal gaps are needed between instances of the event (or peaks of the s-level state). Boneh and Doron (2008) explicitly reject the requirement of temporal gaps between instances of events making up the plural event. This is reflected in their formula by the fact that they do not require the temporal traces of the individual events to be disjoint.

The PRES-PERF denotes an event over a sufficiently long interval, that continues beyond Utt-T. Notice, however, that sentences with the PRES-PERF
need not attribute an individual-level property to an individual: given a plural argument, the event need not involve the participants more than once as the following examples show.

(34) a. Muitos estudantes têm adherido ao Partido Comunista.
    ‘Many students have been joining the Communist Party.’

b. Semanalmente algumas pessoas têm sido interrogadas.
    ‘Every week, some people have been interrogated.’

These examples further show that the definition of the PRES-PERF needs to distinguish the predicate of the plural event from the predicate of the individual events constituting it: an event of many students joining the Communist Party does not multiply the individual joining event of each student. The same effect arises with definite plural arguments as in example (28c), repeated here as (35): a plural event of Joao reading the books of P. Freire need not involve any book more than once:

(35) João tem lido os livros de P. Freire.
    ‘Joao has been reading the books by P. Freire.’

The examples (34) and (35) show that the individual events making up the plural event only have to be subevents of the plural event denoted by the extended VP (including the subject): the lexical predicate has to be shared and the participants of the subevents have to be subsets of the participants of the plural event:

(36) a. Many students join the Communist Party.
    x joins the Communist Party and student(x)

b. Joao read the books by P. Freire.
    Joao reads x and book_by_P.Freire (x)

We conclude that the habitual component of the PRES-PERF does not introduce a modal operator but a meaning of regular iteration over a contextually long interval. The iteration can be distributed over plural participants and consequently the plural event need not affect the participants more than once.

The iteration expressed by the PRES-PERF is conceptualised as a non-accidental generalisation, since the iteration continues beyond Ut-T. This property also induces a modal-like behaviour: like progressives, the PRES-PERF orders the time of evaluation before the (RB of the) time of the event.
As pointed out by Steedman (1997), this induces a modal component to its meaning since we have a “future like” configuration that forces us to quantify over (plausible, inertial) continuations. The PRES-PERF differs from the present progressive in that in sentences with the PRES-PERF the event need not be unfolding at Utt-T: while progressives only need inertial continuation of an ongoing process, the present perfect requires a non-accidental generalisation in order to ensure repetitions of the event that take place after Utt-T.

4.5 Comparison with previous analyses

Even though the operator defined in Section 4.3.1 above captures most of the data, it raises an obvious problem, that of non-compositionality. From the point of view of its morphological setup, the PRES-PERF combines a specification of Tense and Mood, an auxiliary verb and a Past Participle, whereas in the definition given above, information as to (a) the location of the interval of evaluation wrt. Utt-T, (b) the relation between the temporal trace of the event and the interval of evaluation, and (c) the distribution of the basic temporal property over the temporal trace of the “big” event are all attributed to an unanalysed form. In the analysis proposed here, the PRES-PERF is treated as a grammatical idiom: its semantic contribution does not arise through the interaction of the meanings of its parts but is lexically associated with the combination INDICATIVE PRESENT + ter+ (non-agreeing) past participle. A compositional analysis that could trace back different parts of the semantic information to different pieces of morphology would be clearly preferable. In what follows, we will show why two analyses proposed in the literature by Giorgi and Pianesi (1997) and Schmitt (2001), cannot account for the data we are describing, and we will provide some speculation as to the conditions under which a “grammatical idiom” as that represented in (16) might have arisen.

4.5.1 Giorgi and Pianesi (1997)

For Giorgi and Pianesi (1997, 123-126), the Portuguese Present Perfect refers to a habit. They assume that the form ter appearing in this construction is not an auxiliary, by contrast with the form appearing in the other “compound tenses”, but a homophonomous full verb meaning ‘keep’, which as a full verb is a predicate of events (or, in their wording, introduces its own event variable). The participial clause combining with this full verb contains a hidden generic operator, Gen, which ensures repetition. They further assume that when ter + PP appears in the Present tense, ter cannot function as an auxiliary, because the resulting form would compete with the synthetic simple (perfective) past form, which is itself able to act as a “present perfect” (exhibiting resultative, inferential, present relevance, and experiential readings). The lack of a competing form for the other “compound tenses” would ensure that the auxiliary
version of ter can surface in the case of the pluperfect (an explanation which can be extended to the prospective/future perfect, the perfect infinitive, the perfect subjunctive etc.).

Note, first, that this solution is not entirely compositional: the introduction of a hidden operator modifying temporal structure in order to fulfill the requirements of the higher element (ter ‘keep’), with which the building block hosting the operator composes, is a case of coercion (de Swart, 1998), and coercion is not a compositional mechanism (since the meaning of a part is affected by the meaning of the part it will combine with). Secondly, that this operator should be a generic one – or one requiring some sort of iteration of the basic event description – is not justified. If the ter appearing in the PRES-PERF literally meant ‘keep’, we would expect it to select for any homogeneous situation, and only to give rise to obligatory iteration effects in the case of non-homogeneous (punctual, telic) basic eventuality descriptions, as illustrated by (37a-c):

(37) a. Mary kept singing for hours.
    b. Mary kept arriving late.
    c. Mary kept knocking at the door.

Thirdly, as shown by Schmitt (2001), there is no conclusive syntactic evidence for the assumption that ter has the status of a full verb in the PRES-PERF and the status of an auxiliary in the other compound tenses. There are, however, two elements in Giorgi & Pianesi’s analysis that we will explore below, namely the fact that the auxiliary in Portuguese compound tenses is ter, and the role of the ‘simple perfect’ in determining the profile of ter + PP combinations.

4.5.2 Schmitt (2001)

Schmitt’s account of the PRES-PERF (Schmitt, 2001) attempts a more compositional solution in as far as it tries to associate the peculiarities of this form to the selectional restrictions of the Present Tense. Schmitt proposes that the Present Tense, both in Portuguese and in English, selects for stative predicates. However, the Perfect in English has a homogeneous, stative predicate as output, whereas it has a non-homogeneous (bounded) predicate as output in Portuguese. As a result, combination of a Present with a Perfect in Portuguese would violate the selectional restrictions of the Present, unless a coercion operator with a homogeneous stative predicate as output is inserted between the Perfect and the Present. Since the output of the Perfect

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17Although Portuguese still maintains, to some extent, the descendants of the Latin synthetic pluperfect (AMAVERAM > amara), this form is restricted to literary usage. The contrast between the synthetic and the analytic pluperfect, where it still exists, differs clearly from the contrast between the synthetic and the analytic perfect (see Squartini 1999).
is “bounded”, the coercion operator will produce an unbounded iteration of bounded eventualities as the state description required by the Present.\textsuperscript{18}

As stated above, coercion analyses are less compositional than they seem to be. One of the main differences between Giorgi & Pianesi’s and Schmitt’s analysis is the place in the structure where coercion is assumed to take place: for Giorgi & Pianesi, the coercion operator is inserted between the participle and ter, whereas for Schmitt it is inserted between the Perfect operator (non-compositionally associated with \textit{ter} + PP) and the Present.

Schmitt’s analysis relies on assumptions concerning the Present for which there is no conclusive evidence. As stated by Schmitt, the tense-aspect systems of Portuguese and Spanish are quite similar, but the Spanish Present Perfect – even in highly restrictive varieties such as Mexican and Rio de la Plata Spanish, in which the Present Perfect exhibits mainly universal and to some extent resultative readings (while not being felicitous for the expression of “anteriorty with present relevance”) – does not convey iteration across the board. Schmitt assumes that the Spanish Present differs from the English and Portuguese Present in requiring homogeneous situations, but not necessarily stative ones. This assumption is based on the idea that the simple, non-progressive Present in Spanish, unlike in Portuguese, can have a “progressive-like” reading with eventive predicates. According to Schmitt, the following contrasts hold:

\begin{tabular}{ll}
(38) & a. Pedro canta (en este momento).  
& ‘Pedro is singing (at this moment).’  
& Pedro sing.PR.3SG (in this moment) (Sp)  
& the Pedro sing.PR.3SG (in-this moment) (Port)  

(39) & a. Pedro come una manzana (en este momento)  
& ‘Pedro is eating an apple (at this moment).’  
& Pedro eat.PR.3SG an apple (in this moment) (Sp)  
& b. O Pedro come uma maçã (*neste momento)  
& the Pedro eat.PR.3SG an apple (in-this moment) (Port)  
\end{tabular}

These contrasts, however, are much less clear-cut than assumed. For the Spanish examples, most speakers clearly prefer the progressive to the simple present in (38a) and (39a). As to the Spanish/Portuguese contrast, King and Suñer (1980) clearly show that the contrast between simple and progressive present is not essentially different in both languages. For these reasons we do not adopt an analysis that attributes the differences between the Present

\textsuperscript{18}This means that only operators corresponding to de Swart’s (1998) ITER, HAB and PROG are possible candidates for saving the composition, since they are the only ones with states as outputs.
Perfect in Spanish and Portuguese to differences in the makeup or selectional restrictions of the Present in the two languages.\footnote{In fact, the general and most important difference between the Portuguese Present Perfect and the Present Perfect in the restrictive varieties of American Spanish is that the former is always a Universal perfect, whereas the latter admits Existential readings. For a discussion see Laca (2009).}

To sum up, the two previous analyses of the Portuguese Present Perfect pose a number of problems. Giorgi & Pianesi’s analysis builds on a distinction between ter as a full verb and as an auxiliary, which seems doubtful, whereas Schmitt’s builds on a distinction between Presents that select for states and Presents that only select for homogeneous situations (including processes) which does not account for the behaviour of the Present Perfect in Latin American varieties of Spanish.

Both analyses resort to the insertion of hidden operators (Gen in the former case, ITER or HAB in the latter), but the selectional properties of the element triggering coercion do not sufficiently justify that only these, and not other operators, should be required. This means that even assuming a coercion mechanism, we would not be able to account for the fact that “perfect” presupposes “plural” in the case under discussion.

4.6 Towards an explanation

If one takes an unprejudiced look at the data when trying to answer the question as to why the PRES-PERF differs so dramatically from the rest of the Romance Present Perfects, the obvious answer is that the auxiliary for compound tenses in Portuguese is not a descendant from habere, but a descendant from tenere ‘hold, keep’, and that auxiliary substitution of ter for haver is a relatively recent process. Now, the specialization of the PRES-PERF (be it as a form including a pluractional component, as in the variety we examine, or as a non-resultative, Universal perfect in other less restrictive varieties) is also a relatively recent process (Sten 1973, Suter 1984). In fact, Squartini and Bertinetto (2000: 428) suggest that the reason for the particular behaviour of the Portuguese PRES-PERF might be “the presence of the auxiliary ter instead of haver”, but then proceed to discard this explanation on the grounds that some Latin American Spanish varieties behave in the same way even though the auxiliary is in this case haber. However, the data discussed in section 4.2, as well as that discussed in Schmitt (2001), shows clearly that the latter assertion is not true. However restrictive, Latin American Spanish varieties of the Present Perfect do not give rise to iteration effects across the board, are compatible with continuous readings (most notably with individual-level states and with negated events), and maintain a whole family of existential and resultative readings which are lacking in the case of the PRES-PERF.

We would like to suggest that both Giorgi and Pianesi (1997) and Squartini
and Bertinetto (2000) are on the right track when they surmise that the key to the solution lies in ter, but that at the same time the relationship between the lexical choice of an auxiliary for the PRES-PERF and its semantic peculiarities is much less direct than assumed.

The speculation we have to offer is that auxiliary substitution of ter for haver did not particularly affect the other compound forms, but that in the case of the PRES-PERF, it led to the replacement of a construction conveying resultativity or anteriority (w.r.t. Utt-T or another non-past anchor) by a “grammatical idiom” with the semantics defined in (18) above. 20

But why should this have been so only in the case in which the auxiliary is in the Present Indicative? The answer lies in a well known fact: the creation of a (Present) Perfect in languages in which there is already a past form expressing anteriority w.r.t. Utt-T leads to a particularly unstable situation of competition between the new form and the old one. The contemporary Romance and Germanic languages show all sorts of intermediate resolutions of this competition, which is moreover subject to considerable dialectal variation (see for instance Squartini and Bertinetto 2000). Cases of a complete “aoristic-drift” of the Perfect, in which the old “past” form ends up losing the competition against a Perfect which has taken over most of its uses are well documented at least since Meillet (1909/1965).

However, no diachronic law requires that an innovation expand at the expense of an older form, and the predictive power of grammaticalisation paths belongs to the realm of probability, not to that of necessity. It is therefore unfortunate that so little attention has been paid to cases in which an innovation, instead of winning over a potentially competing older form, either disappears or becomes confined to a very special semantic contribution.21 We assume that the latter happened in the case of the PRES-PERF, and that the enabling factor for this restrictive development is to be found in auxiliary substitution.

In fact, the Portuguese Present Perfect used to exhibit readings which are entirely lacking in the form we describe, in particular resultative readings with achievements, and anteriority readings involving quantised (singular or cardinalised) objects and adverbs like once (Suter, 1984). The development leading to a PRES-PERF corresponding to the definition in (16) above is particular to one variety. What seems to be general for Portuguese is the loss of

20This holds for the variety described in this paper. In other Brazilian varieties, the definition seems to be that of a Universal perfect (not necessarily including a pluractionality component), see Sten 1973, Suter 1984, as well as the judgements of the consultants referred to in notes 7 and 9. In European Portuguese, some resultative uses (most notably “future perfect” uses) seem to survive, according to the data in Amaral and Howe (2004).

21Disappearance or semantic specialization of some innovations due to the success of a competing innovation are, however, well studied. See for instance Laca (2000) on the fate of gerundial periphrases with movement verbs in Romance, which were well on their way to become expressions of progressive aspect until they were dislodged by the descendants of STARE in Romance.
resultative readings. The question then arises as to why precisely resultative uses should have been lost. We believe that the explanation is again to be found in ter. Ter gives rise in fact to a clearly resultative construction, which Portuguese shares with Spanish and Catalan, but it is a different construction, in which ter embeds a small clause formed by an object and an agreeing Past Participle, as illustrated in (40a-b):

(40) a. Eu tenho feitas as camas desde segunda-feira.
    ‘I have had the beds ready since Monday.’ (Schmitt 2001)

This construction obviously replicates the semantics of the Latin source of the *habere*-Perfects in Romance: the object is at the time of evaluation in the result state of a previous event. Interestingly enough, our consultant makes a very restrictive use of this construction as well, requiring an actual relationship of possession between subject and object and also that the state be a more or less permanent one.

In the line of explanation we have sketched, the fact that ter (and not haver) enters into the composition of the PRES-PERF does indeed play a role in the semantic peculiarities of this form, but it is an indirect one: the fact that ter enters a clearly resultative construction with an agreeing participle contributed to the loss of resultative readings with its non-agreeing counterpart, the PRES-PERF. Since the simple perfect/perfective past had retained its resultative readings, the semantics of the PRES-PERF was reduced to inclusive contexts (Universal perfect) or, as in the variety we have described in this paper, even further restricted to pluractional contexts.

We do not believe that ter behaves as a full verb in the PRES-PERF (pace Giorgi and Pianesi) – at most, it should be classified as a semantic modifier like the rest of the periphrastic “semi-auxiliaries” of the Romance languages. Such periphrastic semi-auxiliaries are known to preserve some of the properties that characterize their use as full verbs, in particular properties relating to argument structure. Thus, Spanish *andar* is an unergative as a lexical verb, whereas *ir* patterns as an unaccusative. This is partly preserved in the periphrases *andar* + Gerund and *ir* + Gerund, since the former, but not the latter, requires a referential subject and cannot apply “above” the subject (Laca, 2006). Preservation of the original argument structure of ter ‘keep, hold’ as a lexical verb, which requires an external argument (AGENT, CAUSE), might
explain a further peculiarity of the PRES-PERF in the variety we examine: the PRES-PERF is not felicitous in sentences lacking a subject or a place-holder with an analogous function:

(41) a. # Tem chovido muito ultimamente.
   has rain.PP much lately
   ‘It has rained a lot lately.’

b. # (Os ricos) têm construído muitas casas nesse barrio.
   the rich have.PR3PL build.PP many houses in+this neighborhood
   ‘The rich have been building a lot of houses in this neighborhood.’

c. # (Aquí) tem feito um frio danado.
   here has do.PP a cold terrible
   ‘It has been terribly cold here.’

4.7 Conclusion

In the present study we have examined the PRES-PERF in a particularly restrictive variety of Brazilian Portuguese. We have shown that only a restricted range of universal readings are possible with this form. We have further argued that the PRES-PERF has properties characteristic of temporal pluractionals.

We propose an analysis of the PRES-PERF as a grammatical idiom that combines information typical of a verbal pluractional operator with aspectual information concerning the relation between the temporal trace of the pluractional event and the interval of assertion, which in this case clearly corresponds to the Perfect Time Span of Extended-now theories.

We see no possibility of reducing the observed properties of the PRES-PERF to an analysis that gives a compositional meaning to the perfect auxiliary ter and the past participle. We have offered some diachronic speculations as to how the meaning of the PRES-PERF was reduced to Universal readings presupposing pluractionality.

References


