## Locales

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Locale, n.: A place, especially with reference to a particular event.

#### 1. Introduction

### 1.1 Post-Verbal Subjects – The Accepted Paradigm

As is well known, some languages which normally display an S-V-O order allow a V-S(-XP) order, with certain well-established restrictions, in some contexts. The existence of utterances such as those in (1), in Italian, has been extensively discussed by Perlmutter (1978), Burzio (1981), Rizzi (1981) and Belletti (1988) among others. Similar cases in Hebrew are discussed in Borer (1980) and are illustrated in (2).

- 1. Sono arrivati (molti) studenti are arrived (many) students (Italian)
- 2. a. parca mehuma (ha.boqer) erupted.f.sg riot.f.Sg (this morning)
  - b. hitxilu harbe hapganot started many demonstrations
  - c. hopiar kcat rašan laban ba.šamayim appeared little smoke white in the sky

Both Borer (1980) and Belletti (1988) note that unless the subject is clearly extraposed and is in the right periphery (cf.(3)), 'external' subjects are excluded, and the post-verbal subject must be weak. The relevant restrictions are illustrated, in Hebrew, by (4)-(5). We note before proceeding that the Hebrew correlates of (3) are at best marginal.<sup>1</sup>

- 3. Ha telefonato Gianni has telephoned Gianni
- 4. No definites, no strong quantifiers
  - a. \*parac kol vikuax (ha.boqer) erupted.m.sg every argument.M.Sg (this morning)
  - b. \*hitxilu kol ha.hapganot (ha.boqer) started.m.pl all the.demonstrations (this morning)
  - c. \*hopiar ha.rašan ha.laban ba.šamayim (ha.boqer) appeared the.smoke the.white in-the.sky (this morning)

<sup>&</sup>lt;sup>1</sup> Pinto (1997) notes that (3) and similar cases only have a presentational reading, namely, they can only be uttered when the report is of a, that unlike the case for (20), the 'pos received phone call, not an exiting one. Similar effects hold in Hebrew, to the extent that (3) and similar cases are licit. Pinto (op cit.) notes in this context that a covert locative may be the best account for this effect, raising the distinct possibility that (3) should be analyzed along similar lines to (2017) below, ultimately providing further support for the overall analysis provided here according to which V-S orders in the relevant contexts are licensed by locative expressions, *locales*. We do note, however, that the extraposed' subject in (3) need not be weak.

- 5. No unergatives
  - a. \*rabad ganan worked.m.sg gardener.M.Sg
  - b. \*caxaqa yalda laughed.f.sg girl
  - c. \*nazlu mayim dripped.m.pl water.m.pl

# 1.2. Beyond the Accepted Paradigm:

Moving beyond the well-established paradigm above, we note that at least in Hebrew, not all unaccusatives (or passives) allow V-S(-XP) word order, as (6a.f) illustrate:

- 6. a.\*hibšilu šloša tapuxim (val ha.vec) three apples ripened (on the tree) b.\*hitmotetu girot (be-šabat) collapsed walls (on-Saturday) c.\*nirqab qcat basar (ba.megarer) rotted a little meat (in-the.fridge) mayim (ba.layla še-vabar) d.\*qap'u froze water (last night) e.\*putru šloša vobdim (ha.boger) fired.pass three workers (this morning)
  - f. \*culma 'eyze zebra val yedey pil (ha.boqer)
    photographed.pass some zebra by an elephant (this morning)

While syntactic models of the 80's were capable of accounting for the unergative/unaccusative asymmetry in a straightforward way, note, this is no longer the case given present day structural assumptions. Such earlier accounts crucially appealed to the claim that external subjects merge above the verb's final landing site, whereas internal, unaccusative subjects merge as complements of the verb:

7. [S/IP unergative subject ... [VP verb unaccusative subject]]

V-S word orders for unaccustives thus emerged directly from the failure of the deep subject to move, and were impossible for external subjects without postposing.<sup>2</sup> Present day assumptions, however, never generate the subject in its final landing site, and typically allow for the verb, likewise merging low, to move over the initial merger site of the subject in both transitives and unergatives. A sample of such proposed structures is in (8), and we note that if V-S orders emerge simply from the failure of the subject to move to the highest specifier, all of them should allow a V-S word order for unergative subjects without any need for postposing. How, then, is the asymmetry between unaccusatives, on the one hand, and unergative and transitive subjects, on the other hand, to be characterized?

<sup>&</sup>lt;sup>2</sup> Or, as an alternative to postposing, V-S orders for unergatives and transitives could be presumably generated through the movement of V to C over the external argument. We set aside the comparison between these two accounts, involving, as it does, structural assumptions no longer subscribed to in most present architectures.

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8. a. [TP] V+voice [VOICE-P] unerg-subj...V+voice... [V] V ... (subject merging in [Spec,VoiceP], Kratzer, 1996)

b. [TP] V+v [VP] unerg-subj...V+v... [VP] V ... (subject merging in [Spec,vP], Chomsky 1995 interalia)

c. [TP] V ... (subject merging in [Spec,VP], the internal VP-subject hypothesis)

d. [EP] V [TP] unerg-subj V ... [VP] V ... (subject merging in [Spec,TP] below EP, Borer 2005)
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### 1.3. A Double Puzzle and Something on Achievements

Yet a further puzzle is associated specifically with the paradigm in (1)-(2). The cases in (1)-(2), unlike the excluded cases in (6), are unambiguously telic. In fact, they appear to have a clear achievements interpretation. On the other hand, the illicit (presumably unaccusative) cases of V-S intransitives in (6) involve events which, if in SV order, are ambiguous between accomplishments and activities. And yet, in (1)-(2) the subject need not be quantity subject. What, then, licenses the telic reading? The availability of bare mass and plural nouns subjects in such constructions together with a telic reading is illustrated in (9)-(11), in conjunction with number of telicity tests. Specifically, following tests proposed by Kamp (1979) and Partee (1984) (and see also Reinhart, 1996), telic events, when coordinated, give rise to a sequential, rather than simultaneous reading. It follows that the order of coordination affects interpretation for such events, and indeed, the truth conditions for (9a)-(10a) are different from those which hold for (9b)-(10b). A second test, following Verkuyl (1989), shows that the V-S events under discussion cannot be interpreted as continuous in the presence of modifications such as on Sunday and on Monday, but rather, (11) must be interpreted as involving two separate events:3

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9. a. hitparca lava ve-nidleqa / hitparca ve-nidleqa lava erupted lava and ignited / erupted and ignited lava 'lava erupted (first) and (next) ignited'
b. nidleqa lava ve-hitparca / nidleqa ve-hitparca lava ignited lava and erupted / ignited and erupted lava 'Lava ignited (first) and (next) erupted'
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10.a. hitgalu gazim dliqim ve-hitlaqxu discovered.pass gases flammable and 'fired'
a'. hitgalu ve-hitlaqxu gazim dliqim discovered.pass and 'fired' flammable gases 'flammable gases were discovered (first) and (next) burst up in flames' b. hitlaqxu gazim dliqim ve-hitgalu 'fired' gases flammable and discovered.pass

b'.hitlaqxu ve-hitgalu gazim dliqim
'fired' and- discovered.pass gases flammable
'flammable gases burst up in flames (first) and were discovered (next)'

<sup>3</sup>And compare with:

i. a. 'etmol rac dan ve-šar vesterdav ran Dan and sang (

yesterday ran Dan and sang (simultaneous reading possible) b. le-'orex ha.derex zaxal naxaš be-yom rišon ve-be-yom šeni

along the road crawled snake on-Sunday and-on-Monday (continuous crawling possible)

- 11.a. parcu mehumot be-yom rišon ve-be-yom šeni erupted riots on-Sunday and-on-Monday (two occasions of riot eruption)
  - b. hopia rašan be-yom rišon ve-be-yom šeni appeared smoke on-Sunday and-on-Monday (two occasions of smoke appearance)

In turn, the absence of quantity DP for achievement may not be that surprising. Mittwoch (1991) notes independently that transitive achievements may be licensed in the absence of a quantity object. Mittwoch's conclusions are based on cases such as those in (12)-(13) (relevant telicity tests added). The parallel cases in Hebrew are given in (14):

- 12.a. the prospectors discovered gold and found rare coins
  - b. the prospectors found rare coins and discovered gold
- 13.a. Robin found oil on Monday and on Tuesday (requires two diggings)
  - b. The prospectors struck oil on Saturday and on Sunday
  - c. The bulldozer hit bedrock on Saturday and on Sunday
  - d. Mary noticed ink on her sleeve on Saturday and on Sunday
  - e. John spotted wildfowl on Saturday and on Sunday

(based on Mittwoch 1991)

- 14.a. Rina gilta zaha<u>b</u> ve-mac'a matbevot yeqarim Rina discovered gold and-found coins precious
  - b. Rina mac'a matbevot yeqarim ve-gilta zaha<u>b</u> Rina found coins precious and-discovered gold
  - c. Nurit hitxila proyetim xadašim ve-mac'a šeqet nafši Nurit started projects new and-found peace soul 'Nurit started new projects and then (possibly a result) found peace of mind'
  - d. Nurit mac'a šeqet napši ve-hitxila proyektim xadašim Nurit found peace soul and-started projects new 'Nurit found peace of mind and then (possibly a result) started new projects'

Intransitive achievements now present us with a double puzzle. First, these events, but no other telic ones, are licensed without a quantity DP. Secondly, these events, but no others, telic or atelic, allow a V-S-(XP) word order. Are these properties related, and if so, how?

### 1.4 Not All Achievements

The puzzle is further deepened by the fact that not all achievements share the above diagnostics. Some achievements do not permit a V-S word order, and do require a quantity - indeed a strong – subject:<sup>4</sup>

<sup>4</sup>Barring strong focal, contrastive emphasis, weak pre-verbal subjects (bare and with weak determiners) are excluded in Hebrew. For that reason, an S-V instantiation of the cases in (15) is independently ruled out.

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15.a. *nipsequ gšamim (sop sop)
stopped.pl rains (finally)
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- b. \*nigmeru sukaryot (ba.bayit) finished.pl candies (at home)
- c. \*nexecru diyunim (ba.memšala) halted.pl discussions (in the.government)
- d. \*histaymu bxinot (ba.universita) ended.pl tests (in-the.university)
- 16.a. \*ha.memšala hipsiqa diyunim (vim ha.mapginim) the.government stopped negotiations (with the demonstrators)
  - b. \*Rani gamar sukaryhot/xalav (ha.boqer) Rani finished candies/milk (ha.boqer)
  - c. \*kicucey ha.taqci<u>b</u> vacru kidma/proyectim<sup>5</sup> cuts the.budget stopped progress/projects
  - d. \*ha.talmid siyem bxinot (ha.boqer) the.student ended tests (this morning)

Summarizing the puzzle thus far, we note that in present day models, a straightforward account is no longer available for the paradigm in (1)-(2). Furthermore, a more careful inspection reveals that the occurrence of V-S with the relevant restrictions is limited, at least in Hebrew, to a subset of achievements, and that this subset of achievements is precisely those which otherwise allow a telic interpretation without a quantity (deep) object. In the next few pages, I will propose that a unified account for all these factors is possible if we assume that V-S word orders are always licensed by a *locale*, a locative which can function as an existential binder for an event argument. Achievements which license V-S word order are *presentational* ones, in the classical tradition of presentational – they contain a covert *locale*, a locative expression which has existential force, which in turn allows it to bind and existentially close the event argument. That very same *locale* may also bind, and existentially close, Asp<sub>Q</sub>, the node, by assumption, responsible for the emergence of telic, quantity reading.

In the absence of a covert *locale*, these effects are not attested in other event types, telic or atelic, achievements or accomplishments. However, as we shall show, an *overt locale*, when provided, ends up having the very same effects in such events. It licenses weak, post-verbal subjects in V-S contexts, and it licenses telicity in the absence of quantity objects, thereby providing evidence for the system about to be presented, as well as for the postulated covert *locale* in presentational achievements.

In section 2 I turn to the discussion of V- $S_{WEAK}$  licensing with overt *locales* in unergatives which otherwise do not allow V-S orders altogether. General theoretical assumptions concerning event structure and the licensing of the event argument are outlined in section 3. In section 4, I return to *locales*, showing them to have existential force, and outlining the specific workings of the system in generating V- $S_{WEAK}$  word orders in the context of both overt and covert *locales*. I further discuss some empirical predictions of the account. Finally, in section 5 I turn to the licensing of telic readings in presentational achievements, arguing that it, too is licensed by *locales*, as evidenced, yet

<sup>&</sup>lt;sup>5</sup>But note:

i. ha.šoter Yacar tnu Ya /mekoniot the.policeman stopped traffic /cars

again, by the emergence of identical effects in otherwise atelic contexts in the presence of overt *locales*.

### 2. Licensing V1 with Locales

We observed already that in unergative structures, typically intransitive activities or intransitive states, V-S(-XP) word orders are barred. As it turns out, however, such intransitive activities or states can occur entirely felicitously in V-S configurations if a locative pronominal – a *locale* - is added, meaning *here*, *there*, or *chez+agreement*, as illustrated in (17) (activities) and (18) (statives). Furthermore, in the presence of a *locale* the utterance acquires the very same diagnostics otherwise associated with V-S presentational achievements: the subject must be weak, thereby excluding definite DPs, proper names and strong quantifiers:<sup>6</sup>

```
17.a. ('amarti še-) vabad
                          *(šam/kan/ecli)
                                                         (ha.yom)
                                                ganan
                          here/there/chez.me
     (I said that) worked
                                               gardener (today)
   b.*('amarti še-) vabad (šam/kan/ecli)
                                                   Ran/ha.ganan
                                                                      (ha.yom)
      (I said that)
                    worked here/there/chez.me Ran/the.gardener
                                                                      (today)
   c.('amarti še-) yabdu *(šam/kan/ecli)
                                               (kama, šloša) gananim
                                                                         (ha.yom)
     (I said that) worked here/there/chez.me
                                               (several, three) gardeners (today)
                            (šam/kan/ecli)
   d.*('amarti še-) vabdu
                                               kol ha.gananim
                                                                   (ha.yom)
                            here/there/chez.me all the.gardeners
      (I said that) worked
                                                                   (today)
18.a. ('amarti še-) gar *(šam/kan/ecli)
                                               bo'eš (ha.qayic)
     (I said that) resided here/there/chez.me
                                               skunk (this summer)
   b.*('amarti še-) gar (šam/kan/ecli)
                                            ha.bo'eš (ha.gayic)
     (I said that) resided here/there/chez.me
                                                   the.skunk
                                                               (this summer)
   c. ('amarti še-) garu *(šam/kan/ecli)
                                                            bo'ašim (ha.qayic)
                                            (kama, šloša)
     (I said that) resided here/there/chez.me (several, three) skunks
                                                                      (this summer)
   d. *('amarti še-) garu (šam/kan/ecli)
                                               kol ha.bo'ašim (ha.qayic)
      (I said that) resided here/there/chez.me all the.skunks
                                                               (this summer)
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<sup>6</sup> The V-S order in (17)-(18) should and could be distinguished from other instances of V-S orders attested in Hebrew in a variety of context, such as the narrative inversion in (ia) excluded in embedded clauses, or XP-V-S inversion, as in (ib), where no definite restriction applies to the post-verbal subject:

In my judgment, XP<sub>LOC</sub>-V-S inversions, unlike those in (ib), do exhibit a definiteness effect, although possibly more subtle than that associated with *locales*:

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iii. ?ba.xacer sixaqa rina be-kadur in-the yard played Rina with-ball
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Insofar as such effects are present, they are consistent with the analysis proposed, and pattern, in fact, with facts noted in Spanish by Torrego (1989) (see fn. 9 below). Insofar as such effects may not be attested for some speakers, they indicate that XP-V-S is licensed away from *locales* for such speakers, and with locative phrases in a pre-verbal position patterning with any such pre-verbal constituent, regardless of its interpretation.

i. a. patxa ima ve-amra
 opened mother and said
 b. 'etmol rac ran ba.gan
 yesterday ran Ran in-the.garden

19.a.('amarti še-) \*yabad 'az

The effects produced by *locales* in (17)-(19) are not produced by temporal weak pronouns, or by other weak pronouns, such as the reflexive dative in (21a) or the directional (source) one in (21b):<sup>7</sup>

ganan

(ba.gan)

```
(I said that) worked then
                                   gardener (in-the.garden)
   b.('amarti še-) *rac 'az
                              veled (ba.rexob)
     (I said that) ran then boy
                                    (in-the.street)
   c. ('amarti še-) *gar
                                 bo'eš (mi-taxat la.bayit)
                           'az
     (I said that) resided then skunk (under-the.house)
20.a. ('amarti še-)*vobed vata/vakšav ganan
                                                   (ba.gan)
     (I said that) works now/now
                                        gardener
                                                   (in-the.garden)
   b. ('amarti še-)*rac
                         vata/vakšav yeled (ba.rexob)
     (I said that)
                   runs
                         now/now
                                      boy
                                             (in-the street)
   c. ('amarti še-)
                   *gar
                             vata/vakšav bo'eš (mi-taxat la.bayit)
     (I said that)
                   resided
                                          skunk (under-the.house)
                             now/now
21.a. ('amarti še-)*rac
                         10
                                   ganan
                                             (ha.boqer)
     (I said that) ran
                         to.him
                                   gardener (this-morning)
     'I said that a gardener was running around'
   b. ('amarti še-)*naflu mimeni ha.bgadim
                                                   ('axrev še-raziti)
     (I said that) fell
                         from-me the clothes
                                                   (after I lost weight)
   c. ('amarti še-) *gar
                           lo
                                     bo'eš
                                             (mi-taxat la.bayit)
     (I said that) resided to.him
                                     skunk
                                            (under-the.house)
```

The effects are further restricted to weak pronouns. (22) illustrates the distribution of phrasal (stressed) locative pronouns in Hebrew. The distribution of weak locative is illustrated in (23), showing that they must be adjacent to the verb, must be unstressed, and may not be coordinated. That *locales* license V-S order in unergatives, whether activities or statives, only when they are weak pronouns is illustrated in (24)-(25):

Possessive datives have been argued to exhibit relations with (canonical) VP-internal material only, thus binding internal direct and indirect arguments, as well as adjuncts (cf. Borer and Grodzinsky, 1986). It is worth noting that in (i), the possessive dative does *not* bind the subject, but rather the locative expression, thus indicating that the licensing of (i) by possessive datives or otherwise does not bring about a lowering, so to speak, of the external argument. See below for some additional discussion of this point.

<sup>&</sup>lt;sup>7</sup> Similar effects, however, are produced by possessive datives, as in (i) a matter which we do not pursue in this article:

i. a. rac li kelev ba.xacer
 ran to.me dog in.the.yard
 'a dog ran in my yard'
 '\*my dog ran in the yard'

b. gar li bo'eš mitaxat la.bayit resided to.me skunk under to.the.house 'a skunk lived under my house'
'\*my skunk lived under the house'

22. Phrasal locative pronouns (stressed):

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a. kol ha.yeladim 'aklu 'aruxat vereb 'eclénu/kán all the.boys ate supper chez.us/here
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- b. kol ha.yeladim 'aklu 'eclénu/kán 'aruxat vereb (contrastive only) all the.boys ate supper chez.us/here
- c. ha.yeladim qiblu mamtaqim <u>kán ve-šám</u> the.boys received candies here and-there
- d. ha.yeladim qiblu <u>kán ve-šám</u> mamtaqim the.boys received here and-there candies
- 23. *Unstressed locative pronouns (unstressed)*:
  - a. \*ha.yeladim qiblu mamtaqim <u>kan</u> the.boys received candies here
  - b. \*ha.yeladim qiblu mamtaqim <u>kan ve-šam</u> the.boys received candies here and-there
  - c. \*ha.yeladim qiblu <u>kan ve-šam</u> mamtaqim (unstressed locatives, the.boys received here and-there candies weak pronouns)
  - d. ha.yeladim qiblu <u>kan</u> mamtaqim the.boys received here candies
- 24.a. \*xa<u>b</u>ad <u>kán ve-šám</u> ganan (ha.yom) worked here and-there gardener (today)
  - b. \*gar bo'eš <u>kán ve-šám</u> (ba.qayic ha.axaron) resided skunk here and-there (in-the.summer the.last)
  - c. \*vabdu <u>kán</u> (kama, šloša) gananim (ha.yom) worked here (several, three) gardeners (today)
  - d. \*xayu kama/ šloša bo'ašim <u>'eclénu/kán/šám</u> (ba.qayic ha.axaron) lived several/three skunks chez.us/here/there (in-the.summer
- 25.a. \*('amarti še-) va<u>b</u>ad ganan ba.gan/'ecli/ecel Ran (I said that) worked gardener in-the garden/chez.me/chez Ran
  - b. \*('amarti še-) ša<u>k</u>an ha.bo'eš ba.gan/ecli/ecel Ran/šam
    (I said that) dwelled the.skunk in-the garden/chez.me/chez Ran/there
  - c. \*('amarti še-) vabdu gananim ba.gan/ecli/ecel Ran/šam (I said that) worked gardeners in-the garden/chez.me/chez Ran/there
  - d. \*('amarti še-) hitgoreru kol ha.bo'ašim ba.gan/ecli/ecel Ran/šam

(I said that) resided all the skunks in the garden/chez.me/chez Ran/there<sup>8</sup>

A paradigm very much like that in (17)-(18) has been discussed by Torrego, 1989 and Rigau, 1997, in Catalan. Consider the sentences in (26). They illustrate the distribution of post verbal subjects in activity events, presumably unergative constructions. An initial *locale* is necessary to license a weak post verbal subject, as in (26a.b). Although V-S *is* possible without a *locale*, the subject, in that case, must be specific.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> The Hebrew verbs *šakan*, *gar*, *higorer* and *xai* all translate, roughly, as English 'live, reside, dwell'.

<sup>&</sup>lt;sup>9</sup> Torrego (1989) reports a *locale* effect in *locative*-V-S configurations in Spanish, with the *locale* as a phrasal PP (e.g., *in the garden*). As noted in fn. 6, my personal judgments concerning the distribution of pre-verbal locatives in Hebrew accord with those reported in Spanish, although other native speakers conflate pre-verbal locative PPs with other pre-verbal PPs. As will become

```
26.a. Hi canten molts nens
there sing many boys
b. Hi dormen molts nens
there sleep many boys
c. Canten molten nens
sang many boys
"many of the boys sang" (specific reading only)
```

Very much like Italian *ne*, Catalan *en* is a partitive clitic typically allowing cliticization from object, but not from subject position, a restriction traditionally attributed to c-command effects. As it turns out, *en* cliticization from the subject in V-S activities, presumably unergative, is possible, but only when a *locale* is present, as illustrated by (27a.b). In V-S activities without a *locale*, *en* cliticization is blocked. In turn, the distribution of *locales* with *en* cliticization forces the subject to be weak, a restriction otherwise not present in V-S activities, where the subject must be specific:

```
27.a. *En
              canten molts
     of-them sing
                      many
  b. *En
              dormen molts
     of them sleep
                       many
28.a. N'hi
                   canten molts
     of-them-there sing
                          many
  b. N'hi
                   dormen molts
     of-them-there sleep
                                        (Catalan, Torrego 1989, Rigau 1997)
                            many
```

Torrego analyzes such constructions as undergoing a shift from unergativity to unaccusativity. Specifically, if the subject of *locale* activities merges as low as the subject of unaccusatives, the cliticization of *en* as well as the occurrence of V-S order could be subsumed under the properties of unaccusative V-S configurations. However, at least in Hebrew, and *en* cliticization notwithstanding, constituent tests relevant to the unergative/unergative distinction show that the subject in *locale* configurations continues to be 'high' in the relevant sense. Reflexive clitics, which can only co-occur with external arguments (in all event types) may co-occur with the post verbal subject in *locale* configurations. Possessive clitics, which exclude external arguments, but which may modify all lower DPs within the clause, including within adjuncts, continue to be impossible with the *locale* subject (the datives in (29) are interpreted as ethical datives. See Borer and Grodzinsky, 1986 for some discussion):

```
29.a. vabad
                                                     (kol ha.boger)
              10
                        kan ('eyze) ganan
     worked to-him<sub>2</sub> here (some) gardener<sub>2</sub>
                                                     all morning
   b. vabad
              šam {le-rani} ('eyze) ganan
                                                  {le-rani} (kol ha.boqer)
     worked there{to-rani} (some) gardener<sub>2</sub> {to-rani} all morning
      '*A gardener of Rani's worked there all morning'
   c. vabad
              lanu kan
                                              (kol ha.boger)
                            'eyze
                                    ganan
     worked to-us here some gardener
                                              all morning
      '*A gardener of ours worked here all morning'
```

clear below, the *locale* effect is, in fact, predicted to occur in the presence of a pre-verbal phrasal locative, although this matter will not be pursued in detail here.

Putting forth an analysis which shares some important properties with the one to be developed here, but differing from it nevertheless in its event classification, Rigau (1997) proposes that *locales* affect a change in event type, and that *locale* V-S configurations are thus always statives. We note, however, that in Hebrew activity events stay as such, thus remaining distinct from stative activities which, recall, likewise allow *locales*:

### 30. Activities:

- a. vabad šam/kan/ecli ganan be-mešek kol ha.yom /\*be-šaloš šavot worked here/there/chez.me gardener during all-the.day /\*in-three hours
- b. hitrocecu šam/kan/ecli kama/šloša yeladim be-hitlaha<u>b</u>ut be-meše<u>k</u> šava/\*be-šava ran.around here/there/chez.me several/three boys enthusiastically during-hour hour/\*in-hour
- c. vabad šam/kan/ecli ganan ve-šar worked here/there/chez.me gardener and sang (simultaneous reading available)

Nor are the effects restricted to activities. Accomplishments, of the type which was excluded without *locales* in V-S configurations (cf. (6)), are licit with *locales* without a resulting change in event type or syntactic structure:

### 31.Accomplishments

- a. hi<u>b</u>šilu po vasarot tapuxim be-xamiša ša<u>b</u>uvot ripened here tens apples in five weeks
- b. nirqab 'eclexem yoter midai basar be-yomayim rotted chez.you too much meat in two days
- c. putru šam alpey vobdim be-veser daqot fired.pass there thousands workers in ten minutes
- d.  $qa\underline{p}$ 'u šam mayim ve-hi $\underline{p}$ širu  $\neq$  hi $\underline{p}$ širu šam mayim ve- $qa\underline{p}$ 'u froze there water and thawed there water and froze
- e. hi<u>b</u>šilu lanu/\*lahem<sub>2</sub> po vasarot tapuxim<sub>2</sub> be-xamiša ša<u>b</u>uvot ripened to-us/\*to-them<sub>2</sub> here tens apples<sub>2</sub> in five weeks Poss. Dat/\*Refl. Dat

'our apples ripened in five weeks'

We therefore conclude that the effect of *locales* cannot be related to *aktionsart*, but as we shall see, *locales* do play a crucial role in licensing events, in general, an assumption this account does share with Rigau (1997) (and see Borer, 2005 for a fuller review).

### 3. What do Locales License?

### 3.1. Event predication

At the end of the day, I will argue, *locales* existentially bind the event argument. In order to show that this is, indeed the case, however, a brief introduction is necessary to the assumptions that I will make as concerning the representation of event structure.

Taking as a starting point a Neo Davidsonian representation of events, consider the representations in (32). While they certainly do capture the predication relations between the verb and the event, as well as the argumental relations between the event participants and the event, it is easy to see that the representation is altogether too coarse:

32.a. ∃e [run (e) & argument (Kim, e)]

Kim ran

b. ∃e [arrive (e) & argument (Kim, e)]

Kim arrived

c. ∃e [build (e) & argument (Kim, e) & argument (the house, e)]

Kim built the house

d. ∃e [push (e) & argument (Kim, e) & argument (the cart, e)]

Kim pushed the cart

What is missing in (32) is a more detailed information on the specific nature of the syntactic and interpretational relations which hold between the participants and the event. Arguably this is not necessarily all that crucial for intransitive cases such as (32a) and (32b), where we may assume that the argument is contextually interpreted appropriately, given the predication relations between the event argument and the verb. However, this is not the case when more than one participant is involved. Most crucially, the representations in (32c) and (32d) fail to capture the regularities between the syntactic position of the arguments and their respective interpretation – most broadly, that the subject participant c-commands the object participant.

Suppose, then, we consider a more articulate representation, adopting the roles proposed in Borer (2005), where by *subject-of-quantity* we mean, roughly, a participant which is subject to a quantifiable change, and by *originator* we refer to a participant who is, broadly, the source of the action or the state. <sup>10</sup> A more articulate representation would be as in (33). (33) presupposes the existence of a telic and atelic syntax, or in the terminology of Borer (op. cit.), *quantity* and *non-quantity* events, such that it gives rise to the correlation between the syntactic position of participants and their interpretation:

## 33.a. Quantity (telic) Intransitive (unaccusative syntax):

∃e [subject-of-quantity (Kim, e) & arrive (e)]

- b. Non-quantity (atelic) Intransitive (unergative syntax)
- ∃e [originator (Kim, e) & run (e)] c. Quantity (telic) Transitive:
  - ∃e [originator (cat, e) & subject-of-quantity (the tree, e) & (climb, e)]
- d. Quantity (atelic) Transitive:

∃e [originator (cat, e) & default participant (the tree, e) & (climb, e)]

Note now that although the event in e.g. (33c) must be quantity, as it gives rise to a *subject-of-quantity* interpretation, otherwise not possible, the quantity of such an event is interpreted, in (33c), through the roles assigned to the arguments, and not through the direct predication of the event itself of *quantity*, although, by assumption, quantity *is* a property of events. This, in turn, is a relatively standard move. Analyses of event structure which utilize thematic roles, or alternatively, notions such as *causer* or *agent*, typically have built into them the assumption that the particular array of argument roles found in an event amount to its characterization, or at any rate, amount to the degree of characterization that is grammatically relevant. It is easy, however, to show that this could not be the case. Cases such as (34a.b), below, are clearly quantity events, telic, and yet a direct internal argument is not present. (35a) is an activity, while (35b) a state,

 $<sup>^{10}</sup>$  I am setting aside here, as largely orthogonal, the grammatical distinctions, such that them may exist, between *causers* and *agents*.

and yet these, too, cannot be characterized through roles assigned to arguments, because no referential arguments are present nor are any roles assigned: 11

```
34.a. The army took over. (quantity)
b. He moved in on my girlfriend
35.a. It rained (activity)
b. It was cold (stative)
```

It thus appears that if an event such e.g. as (34a) is to be characterized as a quantity one, such characterization must be direct – quantity must be directly predicated of the event, giving rise to the event properties in (36):

```
36.a. ∃e [quantity (e) & take-over (e) & ]

b. ∃e [rain (e)] (b'. ∃e [activity (e) & rain (e)])<sup>12</sup>

c. ∃e [state (e) & cold (e)]
```

In turn, if events are predicated not only of the lexical item (to wit, *take-over; rain; cold*) but also of an event type, it would be parsimonious to assume that the interpretation of arguments, to the extent that they exist, is dependent on the event type, rather than the other way around. As such, this approach contrast with many little-*v* type approaches (e.g. Harley, 1995, 1996, 2001, Marantz, 1999, Arad 2005 and subsequent work), where *v* is, in essence, an argument assignment template, an approach which appears to be problematic in view of the existence of activity event types which nevertheless have no argumental roles at all, such as (35a). As an alternative, we may assume that a referential DP in the (structural) subject position of activities will be interpreted as an originator of such an activity, if it is not already assigned another role. As the subjects of weather verbs are not referential, they are not thus interpreted, although, by assumption, they occupy the same position as other activity subjects.

Schematically, then, the picture that emerges is as in (37), and we note that insofar as syntactic realization is unambiguous, the representations allow some argument roles to remain unspecified (see Borer, op. cit. for discussion):

<sup>11</sup> Note that it is not helpful to assume that in (34) and similar cases quantity reading is induced by a silent or elided argument. First, the meaning of *the army took over* (=the army became the dominant power) is distinct from that of *the army took over the city* (=occupied the city). Second, silent arguments typically do not license a telic interpretation where they *can* be shown to plausibly be present, e.g., following verbs such as *eat* or *drink*. Assuming that the expletives in (35a.b) are quasi-arguments is not helpful either. Certainly, even if quasi-argumental, *it* in (35a) is not an *agent* or a *causer*, thereby rendering its quasi-argumental status semantically non-informative as concerning the type of event in which it may be implicated.

<sup>&</sup>lt;sup>12</sup> In Borer (2005) I argue that *activity* is not a predicate of events, and rather, it is an interpretation assigned to events which are not otherwise specified as quantity or state. This matter is set aside here as it is largely orthogonal to our discussion of *locales*.

- 37.a Quantity (telic) Intransitive (unaccusative syntax)
  - ∃e [quantity (e) & subject-of-quantity (Kim, e) & arrive (e)]
  - b. Non quantity (atelic Intransitive (unergative syntax)
    - ∃e [originator (Kim, e) & run (e)]
  - c. Quantity (telic) Transitive:
    - ∃e [quantity (e) & originator (cat, e) & subject-of-quantity (the tree, e) & climb (e)]
  - d. Non-quantity (atelic Transitive:
    - ∃e [originator (cat, e) & default participant (the tree, e) & climb (e)]

Once we assume events are directly interpreted through predication, and not through the projection of arguments, we must address the question of what, if any, are the syntactic manifestations of such events and event predication. How, in other words, is the event argument syntactically licensed? We must address an additional question as well. We concluded, largely on the basis of the properties of weather activities, that event typing is not dependent on argumental projection. We did not, however, address the obligatory presence, at least in English, of an expletive in such contexts. Why is *it* obligatory, precisely where a referential DP would be interpreted as an originator? In what follows, I will suggest that the second question is one of the answers to the first. *It* is obligatory because it licenses, syntactically, the event. Event argument licensing, I will suggest, can be accomplished by expletives, by referential DPs in the relevant structural position, and most saliently for our purposes, by *locales*.

### 3.2. Licensing the Event Argument

Suppose we assume now that syntactically, the event argument in both telic and is predicated of a specific grammatical structure with a specific interpretation: an (aspectual) node corresponding to *quantity* for telic events ( $Asp_Q$ ) and a stative structure for stative events, whatever that may turn out to be, and to be notated, henceforth, as SP. The picture that emerges, is as in (38), in turn giving rise to the Neo-Davidsonian representation in (37) (and cf. fn. 12 for the structure of (38b)):

38.a. Stative:	XP	 SP	VP/AP	
b. Eventive, atelic (activity):	$[_{XP}$		$[_{ m VP}$	]]]]
c. Eventive, telic:	$[_{\mathrm{XP}}$	 [ASP-Q	$[_{ m VP}$	]]]]]

What, however, is the syntactic nature of the event argument itself, and how is it licensed? Higginbotham (1985) and much subsequent work suggest that the event argument must be existentially bound by tense. Higginbotham (op. cit.) further suggests that the event argument, like other arguments, is associated with the lexical head of the predicate, although we note that unlike other arguments licensed by lexical heads, the event argument, in Higginbotham's system, does not project syntactically.

As it turns out, however, licensing the event argument through tense and/or through lexical predicate heads is rather problematic. If event arguments are associated with lexical heads, it is not clear why cases such as (39a.c) are grammatical, given the fact that they contain an unbound, indeed, unassigned, event argument associated, respectively, with *damaged*, *drinkable* and *colossal*, the very same event argument

which, by assumption, is assigned and is bound, in (40), by the predicative adjectives with an event reading resulting: 13

- 39.a. a damaged window
  - b. a drinkable liquid
  - c. a colossal (state of) confusion
- 40.a. The window is damaged
  - b. The liquid is drinkable
  - c. The state of confusion is collossal

Turning to licensing by tense, we note that the event nominals in (41) are licit, although the event argument is clearly not bound by tense: 14

- 41.a. The instructor's (intentional) examination of the student (for seven days)
  - b. The frequent collection of mushrooms (by students)
  - c. The monitoring of wild flowers to document their disappearance
  - d. The destruction of Rome in a day

If, then, the event argument is not licensed by tense, or not assigned by a particular lexical head-of-predicate, how is it represented structurally, and how is it licensed? In Borer (2005) I suggest that the event argument is associated with its own node, E(vent)P. Further articulating the structures in (38), then, gives rise to (42), with EP headed by a null position, a variable, which must be bound to be licit: 15

42.a. Stative:	$[_{\mathrm{EP}}$	$e_{E}$ ([ $_{TP}$ )	$[_{\mathrm{SP}}$	$[_{ m VP/AP}$	]]]]]
b. Eventive, non-quantity:	$[_{\mathrm{EP}}$	$e_{E}([_{TP})$		$[_{ m VP}$	]]]]]
c. Eventive, quantity:	$[_{EP}$	$e_{E}([_{TP})$	[ASP-O	$[_{ m VP}$	]]]]]

By assumption, and given the grammaticality of utterances such as those in (43)-(45), the event argument in them is licensed. If we assume, in turn, that the licensing of the event argument consists of binding it, then it must also follow that these structures contain a binder for it:

- 43.a. Mary is tired
  - b. John broke the computer
  - c. Jane ran in the park

<sup>&</sup>lt;sup>13</sup> The problem generalizes, note, to all accounts which assume that argument roles of any kind are associated with lexical heads, in that, e.g., *the confusion is complete* shows no instantiations of the putative arguments of *confuse*, including the event argument.

<sup>&</sup>lt;sup>14</sup> The assumption that the derived nominals in (41) contain an event argument is following Grimshaw (1990), who shows compellingly that such nominals have the grammatical properties of events. Not so the nominals in (i), although at times they may denote an event (note that the analysis proposed here and in Borer (2005, forthcoming) per force must cast this result in different structural terms from the lexicalist ones proposed by Grimshaw, op. cit.):

i. a. The examinations were thorough/lasted seven hours

b. \*Mary's frequent examinations

c. \*The collection to document the disappearance of mushrooms

d. The (\*frequent) wedding lasted several hours

e. The (\*intentional) lecture took three hours

<sup>&</sup>lt;sup>15</sup> See reference on the rationale for placing EP above TP.

- 44.a. It rained
  - b. It was cold
- 45.a. There was a boy in the garden
  - b. There arrived from China a crate with a red knob

Considering first the pair in (45a.b), we observe that the claim that expletive *there* may function as an existential binder is hardly a novel one. Specifically, suppose now that it binds e<sub>E</sub>, thus effectively providing existential closure for the event argument. Extending this rationale to the referential DP subjects in (43) and to expletive *it* in (44a.b), suppose they, too, existentially bind e<sub>E</sub>, thereby existentially closing the event argument, and that they may do so providing they c-command e<sub>E</sub>, or more specifically, that they occupy the [Spec,EP] position. For referential DPs, the existential force, I assume, comes from the fact that they, themselves, are presumably existentially closed when in the subject position, and hence may bind the event arguments. As for pronominal expletives such as *it*, we would need to assume that they are, quite simply, inherently existentially closed, possibly a carryover from their pronominal properties. We return to the existential function of *there* shortly. The relevant syntactic structures are in (46) (irrelevant portions omitted). We note that expletives may occur in gerunds, with an event interpretation resulting, presumably in the absence of TP, as illustrated by (47):

```
46.a. [EP] Mary-nom eE ([TP] Mary-nom ) [SP] [AP] tired [EP] it-nom EE ([TP] it-nom ) [EP] [EP] there-nom EE ([EP] there-nom ) [EP] a boy [EP] in the yard [EP]
```

- 47.a. It being so cold in California is atypical
  - b. There being a boy in the garden bothers me

The picture that now emerges is clearly reminiscent of the EPP, in that it mandates, effectively, a subject of some sort for events, insofar as the event argument needs to be licensed. We note, however, that it differs from the EPP in applying to events, rather than to propositions, and as such, we expect it to apply to event nominals and go gerunds as well, a matter that we set aside for reasons of space.

Other predictions now emerge. Specifically, if EPP effects emerge from the need to existentially close the event argument, and if any (existentially closed) constituent in [Spec,EP] may existentially close the event argument, we predict existential closure of the event argument by elements which are neither expletives nor argument DPs, but which have existential force. Furthermore, and in contrast with the EPP as typically understood, if the event argument can be bound by an element which is not in [Spec,EP],

 $^{16}$  As is well known English, but not many other languages, allows weak pre-verbal subjects, in a position where they themselves require existential closure, and hence cannot very well be assumed to existentially close  $e_{\rm E}$ . The matter is set aside here for reasons of space, but the reader is referred to Borer (2005), where it is discussed at some length, and where it is proposed, following Dobrovie-Sorin and Laca (1996), that weak pre-verbal subjects in English are licensed only when they have a locative force. As such, their distribution supports the claim that existential closure is by locative expressions, and thus, by extension, supports the role of *locales* function as existential binders of  $e_{\rm E}$ .

neither an expletive nor an argumental DP are required to bind the event, and we would then expect the possibility of an EP headed by e<sub>E</sub>, but missing a specifier altogether. 17

### 4. Back to Locales

#### 4.1. Locales and existential closure

It remains an open question, for this author, as to why it is specifically locatives which have existential force over events, as opposed to, e.g. temporal expressions, as is more frequently assumed. That locative expressions *do*, however, have existential force, and that this function tends to go hand in hand with licensing post-verbal subjects, is well-established. An extraordinarily detailed study of the correlation between locatives, existentials, and the placement of the subject is found in Freeze (1992). Freeze (op. cit.) summarizes his empirical findings for numerous languages in the table replicated below (with minor expository adjustments) (Freeze's table 3, p. 564):

48.		AS IN	PREDICATE LOCATIVE		EXISTENTIAL				
_									
	SVO	Russian	R	COP L		L	COP	R	
		Finnish	R	COP L		L	COP	R	
		Catalan	R	COP L		Ø	P-COP	R	
	VOS	Chamorro		COP L	R		COP	R	L
		Palauan		COP L	R		COP-P	R	L
	VSO	Tagalog		COP L	R		COP	R	L
		Palest.	$R_2$	COP L	R <sub>2</sub> (topicalized)		COP-P	R	L
		Arabic							
	SOV	Hindi	R L	COP		LR	COP		

R=subject role; L=locative, COP=copula, P=locative prepositional clitic

Freeze concludes compellingly that locatives are systematically implicated in the derivation of existential meaning, and that such an existential meaning is available whenever the locative is either in the subject position, or in a head position which he associates with I. The latter is instantiated in languages such as Catalan, Palauan, Palestinian Arabic or Italian, in the presence of a locative proform which is attached to the verb or to the copula. In all these cases the subject is post-verbal, in the intended sense, in that it always occurs following the copula, and not immediately after the locative expression and preceding the copula. Freeze concludes that full locative expressions in existentials are in the canonical subject position, and that locative clitics correspond to a null *pro* in the subject position (and see also Bresnan and Kanerva,

The issue is resolved, in Borer (2005), through invoking indexing relations between T and E, which effectively allow a DP in [Spec,TP] to be interpreted as an originator. As a general matter we note that the issue only emerges for cases of atelic transitive expletives. In intransitive cases, the single argument can always be interpreted as the default (single) argument of the particular event type it participates in. In turn for telic transitives, the object is assigned a distinct role still allowing the subject to be interpreted as a default participant without further specification. It is thus only when the object merges in [Spec,F\*P] and the subject is not in [Spec,EP] that a resolution is needed which is not otherwise already available.

<sup>&</sup>lt;sup>17</sup> A theory-internal issue emerges here concerning the position of the subject as well as the assignment of originator role to that subject in the presence of an expletive in [Spec,EP]. That such originator role may be assigned is evidenced by cases such as those in (i):

i. a. On the third floor, there worked two young women called Maryanne and Aya ...

b. Above them, there pranced three horses on the Parthenon frieze (examples based on Levin and Rappaport Hovay, 1995)

1989). He further concludes that predicate locatives and existentials are but two facets of the same coin, and that their complementary distribution derives from the fact that they are derived from a single source. Our claim that the locatives in Hebrew, Spanish and Catalan have an existential function, and that they are either in [Spec,EP] (Spanish) or in E (Hebrew, Catalan), with the (logical) subject in some specifier lower than E (and hence post-verbal) is clearly entirely consistent with this picture. We note, as an extension of Freeze's picture, that while locatives are certainly required for the configuration in question to emerge, they need not be arguments. More crucially, the existence of a theme is not necessary, and the verbal element need not be restricted to the copula. Thus, in accordance with Freeze's general picture, the constructions we discussed in Hebrew, Catalan and Spanish all exhibit existential force in configurations which involve a 'high' locative, and an agreeing subject, theme or otherwise, following the highest verbal element, be it a copula or the verb. While we must continue to ponder the issue of why this is licensed in the presence of high locatives, that it is indeed so appears beyond dispute. Even in English, a language otherwise very particular about licensing postverbal subjects, it is precisely locatives which can most freely do so, in the so-called locative inversion structure. Nor is locative inversion restricted to unaccusatives (or themes), as has been conclusively shown by Levin and Rappaport Hovav (1995), from which we note the following – activity and state - examples: 18

- 49.a. Opposite the landing-place stood half-a.dozen donkeys with saddles on their backs etc.
  - b. On the third floor worked two young women called Maryanne Thomson and Ava Brent...
  - c. ...rafts of styrofoam on which dozed naked oily bathers lying on their backs ...
  - d. Above them pranced the horses on the Parthenon frieze
  - e. Around here heaved and shuffled the jeaned and T-shirted ... crowd

Of particular interest is the example in (50). Note that here a weak post-verbal subject is licensed by a deictic locative marker (although not a clitic) which is not semantically vacuous, and yet has clear existential force in addition to whatever locative meaning it may convey (and see also Tortora, 1997, for the claim that existentials derived from locatives retain their locative interpretation, and that it is the existential function which is derived from the locative one, rather than the other way around):

50. Here was a young girl who could out-strut anything on two legs (from G.F. Edwards, *A toast before dying*, quoted in Levin 1999, in the context of the use of prefix *out*)

We note, finally, the exclusively existential, *non-locative*, use of so-called *existential there*, possible (contrary to what is commonly claimed) in a wide range of (intransitive) constructions, including stative and eventive atelic configurations. Interestingly,

<sup>&</sup>lt;sup>18</sup> The few comments here on locative inversion are mostly intended to show that in principle, English does allow the event argument, argued to be in EP, to be bound by a locative phrase. It is not our purpose to propose a full analysis for locative inversion in English, which is more restricted than the Hebrew construction and in ways which are not clearly relevant to our discussion here. For a fuller discussion of locative inversion in English, see Bresnan (1994), as well as Levin and Rappaport Hovav (1995), among many others.

however, the omission of the locative expressions in both (51) and (52) causes a marked deterioration in their felicity: <sup>19</sup>

- 51.a. There lived ??(in London) in the 19<sup>th</sup> century a famous author
  - b. There danced ??(in the woods) this morning three elves
  - c. There galloped ??(in my back yard) a brown moose this morning
- 52.a. there is a cat ??(in the yard)
  - b.??there were five policemen yesterday

I consider the fact that English *there*, or, for that matter, Italian *ci*, have lost their locative meaning in the context of existential sentences to be neither necessary nor sufficient for the emergence of an existential meaning. In other words, *there* as well as Italian *ci* have lost their literal locative meaning and retained the existential one, but ultimately, I concur here with Freeze (1992) and with Tortora (1997) that the origin of the existential meaning resides with the locative function, still retained by *here*, as in (50), and by the entire deictic locative paradigm in Hebrew.

The reason for the existential meaning of locatives, however, remains mysterious in Freeze's study, and is in fact largely unstudied, to the best of my knowledge. We therefore must ask what it is that *locales* in actuality license. Standardly, it is assumed that the existential force of locative expressions is applicable to the post-verbal subject. It is because of that that the subject is weak, and that the propositions under considerations have an existential-type interpretation. I would like to suggest, however, that although *locales* have an existential force, what they close is not the subject, but rather the event argument, effectively through the binding of e<sub>E</sub>. I would further like to suggest that their syntactic position, pre-verbal or in an I-like node, as Freeze (op. cit.) convincingly shows, follows precisely from that function. Given the fact that, according to the present account, e<sub>E</sub> is the highest functional head in a proposition, and that *locales* must c-command it in order to bind it, they must be either in the subject position, as in (53a), or alternatively, adjoined to e<sub>E</sub> itself, as in (53b):

53.a. 
$$[EP [Spec \exists LOCALE]]$$
  $e_E [TP \dots]$ 

b.  $[EP \exists LOCALE e_E [TP \dots]]$ 

Consider now the properties of the subject. I suggested that subjects which are themselves existentially closed, either because they are inherently strong (e.g. strong quantifiers, specific DPs) or because they are discourse anaphors (e.g. definite descriptions, proper names) may bind  $e_E$ , thereby existentially closing the event. Weak subjects, on the other hand, by assumption cannot perform such a task. We therefore predict directly the ungrammaticality of the paradigms in (5)-(6), repeated here as in (54)-(55) which  $e_E$  is not bound, the event not closed, and the subjects themselves not closed either, for that matter:

<sup>&</sup>lt;sup>19</sup> I set aside here the differences between *there* insertion constructions with *be* and *there* constructions with other verbs as largely orthogonal to our main attempt to ascertain the connections between locatives and existential closure. Note that the requirement for a locative in *there* constructions does not extend to passive cases such as those in (i):

i. there was a policeman fired yesterday

- 54.a. \*rabad ganan worked.m.sg gardener.M.Sg
  - b. \*caxaqa yalda laughed.f.sg girl
  - c. \*nazlu mayim dripped.m.pl water.m.pl
- 55.a. \*hi<u>b</u>šilu šloša tapuxim (val ha.vec) ripened three apples (on the.tree)
  - b. \*hitmotetu qirot (be-šabat) collapsed walls (on-Saturday)
  - c. \*nirqab qcat basar (ba.meqarer) rotted a little meat (in-the.fridge)
  - d. \*qap'u mayim (ba.layla še-vabar) froze water (last night)
  - e. \*putru šloša vo<u>b</u>dim (ha.boqer) fired.pass three workers (this morning)
  - f. \*culma 'eyze zebra val yedey pil (ha.boqer) photographed.pass some zebra by an elephant (this morning)

We further predict, correctly, the ungrammaticality of weak preverbal subjects in Hebrew. In such cases, again,  $e_E$ , if bound, is bound by a subject which is itself not existentially closed, and hence the result is that neither event nor subject are licensed:<sup>20</sup>

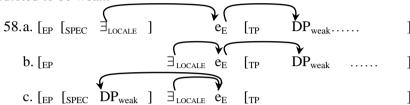
- - b. ('amarti še) \*yalda lo caxaqa (I said that) girl not laughed.f.sg
  - c. ('amarti še) \*ha.boqer mayim nazlu (me-ha.tiqra) (I said that) the.morning water.m.pl dripped.m.pl (from the.ceiling)
- 57.a. ('amarti še) \*tapuxim hi<u>b</u>šilu (val ha.vec)
  - (I said that) apples ripened (on the.tree) b. ('amarti še) \*(be-šabat) girot hitmotetu
  - (I said that) (on-Saturday) walls collapsed
  - c. ('amarti še) \*basar nirqa<u>b</u> (ba.meqarer) (I said that) meat rotted (in-the.fridge)
  - d. ('amarti še) \*vobdim lo putru (I said that) workers not fired

Consider now the situation in the presence of a *locale* which licenses  $e_E$ , and suppose, without further discussion that when  $e_E$  is itself existentially closed by a *locale* it may, indeed must, existentially bind its argument, thereby forcing it to be weak. Given the configurations we discussed so far for such existential binding of  $e_E$ , there are three

 $<sup>^{20}</sup>$ Non-focal stress on pre-verbal subjects and adverbs. For expository reasons, exemplification is with bare singulars which independently never allow a strong reading and with bare plural and mass which are generic, when not weak.

The prediction is that weak preverbal subjects should be universally barred, unless the event is otherwise licensed. For a discussion of what such licensing may be in a language such as English, in which weak subjects are licit, see Borer (2005).

possible configurations for the subject to consider. One involves the presence of a *locale* as a full phrase, by assumption in [Spec,EP]. In such cases, it clearly blocks the appearance of the subject in that position and such a subject must now be in the next lower specifier, [Spec,TP], as in (**Error! Reference source not found.**a). If, on the other hand, the *locale* is adjoined to  $e_E$  (or more accurately, adjoined to the verb that is adjoined to  $e_E$ ), the subject, if there is one may occur either in [Spec,EP] or in [Spec,TP]. In the latter case, it will be post-verbal in the intended sense (cf. (58b)), but not so in the former case, in which it will be pre-verbal (cf. (58b)). In all these cases, the subject is predicted to be weak:



The configuration in (58a) is that discussed in Spanish by Torrego (1989), and noted in fn. 9. We further noted (cf. fn. 6) that although the configuration may be attested in Hebrew, its effects are quite possibly obscured by the existence of a general operation which licenses post-verbal subjects in the presence of a fronted constituent, and that in these cases no definiteness effect is attested for the post-verbal subjects. Consider, however, the configuration in (58b). It now emerges as the configuration which accounts for the primary puzzle discussed in this article thus far: the grammaticality of the Hebrew paradigm in (17)-(18) (activities and states) and in (31) (accomplishments), and the Catalan paradigm in (26) and (28), all cases in which post-verbal weak subjects are licensed in the presence of locales. In these cases, I submit, the e<sub>E</sub> cannot be bound by its own argument, as the argument is weak. Once it is bound by a *locale*, however, it may bind its own argument, thereby creating a licit structure. In fact, we note now, paradoxically, that the problematic cases now emerge as those associated with the classical accepted paradigm. Within the approach developed here it is no longer obvious what, if anything, binds e<sub>E</sub> and existentially closes the event argument in (1)-(2), a matter to which I return shortly.

Consider, finally, the configuration in (58c). For Freeze (1992), such configurations would be ruled out by the assumption that the specifier is occupied by a locative *pro* form, thereby effectively blocking a pre-verbal subjects in the relevant configurations. Suppose, however, that locative *pro* form need not occupy [Spec,EP], and that the subject may appear there, where, we predict, it would have to be weak. If correct, note, these would serve as cases in which, contrary to the regular situation, weak preverbal subject in Hebrew are licit, or, sharpening the contrasts, bare mass nouns and plurals are possible without a generic interpretation. While judgments may be subtle, the prediction is nevertheless borne out as the following cases, contrasting with (56)-(57), show:<sup>21</sup>

<sup>21</sup> A *locale* cannot license (56b) and (57d):

i. a. ('amarti še) \*yalda lo caxaqa 'ecli (cf. 56b) (I said that) girl not laughed.f.sg chez.me

b. ('amarti še) \*Yo<u>b</u>dim lo putru kan (cf. 57d) (I said that) workers not fired here

This suggests rather straightforwardly, and not particularly surprisingly, that negation scopes over E and over its existential closure, and that the bare (weak) indefinite in (ia.b)cannot scope

```
vabad
59.a. ('amarti še)
                   ?ganan
                                                   'ecli
                                                             ha.boger
                                                                          (cf. (56a))
      (I said that) gardener.M.Sg worked.m.sg
                                                   chez.me this.morning
   b. ('amarti še) tapuxim
                            hibšilu
                                      šam (val ha.vec)
                                                                          (cf. (57a))
     (I said that) apples
                            ripened there (on the.tree)
   c. ('amarti še) girot
                         hitmotetu 'eclenu (be-šabat)
                                                                          (cf. (57b))
     (I said that) walls
                         collapsed chez.us (on-Saturday)
   d. ('amarti še) basar
                         nirqab šam (ba.megarer)
                                                                          (cf. (57c))
     (I said that meat
                         rotted there (in-the.fridge)
```

It thus emerges that the configuration in (58c) is possible, allowing for e<sub>E</sub> when existentially closed by a *locale*, to existentially close the DP in its own specifier, a predictable extension of the system presented here.

### 4.2. Presentational achievements and covert locales

Consider again, then, our starting point, the well known paradigm in (1)-(2), repeated here as (60)-(61):

```
60. Sono arrivati (molti) studenti
are arrived (many) students (Italian)

61.a. parca mehuma (ha.boqer)
erupted.f.sg riot.f.Sg (this morning)
b. hitxilu harbe hapganot
started many demonstrations
c. hopiax kcat xašan laban ba.šamayim
appeared little smoke white in the sky (Hebrew)
```

In our subsequent discussion we noted that evidence from Hebrew suggests that the occurrence of post verbal subjects - without locales - is in actuality quite limited, and is only attested with a subset of achievement events, specifically those which are presentational. We note specifically that in all such achievements, the subject, so to speak, comes to exist as a result of the event. The 'riot' in (61a) exists by virtue of the event that created it, the 'students' in (60) exist by virtue of having entered the world of discourse by arriving, and so on. It is thus eminently plausible to assume, precisely in such cases, the presence of a covert, abstract locale which functions exactly on a par with an overt one: it binds  $e_E$ , thereby existentially closing it, and by doing so, forces the post verbal subject, agreeing with such  $e_E$  and hence bound by it, to be weak as well.

For completeness sake we note that the appearance of a covert *locale* for the paradigm in (60)-(61) must be assumed optional, as indeed is the appearance of an overt one (or, for that matter, its interpretation as a *locale*, binding the event), so as to derive the grammaticality of the cases in which a pre-verbal, strong subject binds the event argument and a *locale* is unnecessary, indeed, presumably excluded in its binding instantiation or vacuous quantification would emerge:

62.Molti studenti sono arrivati many students are arrived

over negation, again as expected. It also suggests that insofar as *locales* behave here exactly as existential closure typically does in the presence of negation, *locales* indeed *are* instances of existential closure. We note, as further confirmation, that with focal stress (56b) and (57d), as well as (ia.b) are licit. The matter is not pursued further for reasons of space.

- 63.a. ha.mehuma parca ha.boqer the.riot.f.Sg erupted.f.sg this morning
  - b. Harbe hapganot hitxilu ha.yom many demonstrations started today
  - c. ha.xašan ha.la<u>b</u>an ho<u>p</u>iax ba.šamayim the.smoke the.white appeared in the sky

It therefore follows that the covert *locale* is either an abstract operator in the structure, or alternatively represents a locative optionally associated with the verb. Its optionality in turn argues against building its meaning directly into the lexical semantics of the verb.

We are now in a position to distinguish between those achievements which are presentational, as in (60)-(61) and those which are not, to wit, those involving an event coming to a close as in (15), repeated in (64). In the achievements in (64), we note, not only doesn't the subject come to exist, so to speak, as a result of the event, but quite the contrary. The subject is clearly pre-supposed, thereby making its impossibility as a weak DP impossible, thus accounting for the ungrammaticality of (64):

64.a. \*nipsequ gšamim (sop sop)
stopped.pl rains (finally)
b. \*nigmeru sukaryot (ba.bayit)
finished.pl candies (at home)
c. \*nexecru diyunim (ba.memšala)
halted.pl discussions (in the.government)
d. \*histaymu bxinot (ba.universita)
ended.pl tests (in-the.university)

By way of confirmation of the reason for the ungrammaticality of (64), we note that even when a *locale* is added, the utterances are still ungrammatical. As such, they contrast with, e.g., V-S accomplishments that could be thus licensed (cf. the contrast between (6) and (31)):<sup>22</sup>

b. nigmeru (ba.xanut) kol ha.sukaryot (ba.xanut) finished.pl (in-the.store) all the.candies (in-the.store)

Under the assumption, entirely standard, that postposing diagnostics, however analyzed, are associated with the subject occupying a pre-verbal subject position at *some* point of the derivation, the behavior of the subjects in (i) is entirely consistent with the assumption that they, themselves, existentially close the event when in [Spec,EP].

<sup>&</sup>lt;sup>22</sup> Idan Landau (p.c.) reports that V-S word orders are possible for achievements of this type, albeit with a strong subject, as, indeed, predicted. Significantly, such strong subjects display the diagnostics of post-posed subjects, in following adjuncts, where present:

i. a. nipsequ (sop sop) ha.gšamim (\*sop sop) stopped.pl (finally) rains (\*finally)

c. ne¥ecru (ha.boqer) kol ha.diyunim 'im ha.palestinaim (\*ha.boqer) halted.pl (this.morning) all the.discussions with the.Palestinians (\*this.morning)

d. histaymu ('etmol) ha.bxinot ba.universita (\*'etmol) ended.pl yesterday the.tests in-the.university (\*yesterday)

- 65.a. \*nipsequ kan gšamim (sop sop) stopped.pl here rains (finally)
  - b. \*nigmeru eclenu sukaryot (ba.bayit) finished.pl chez.us candies (at home)
  - c. \*nexecru šam diyunim (ha.boqer) halted.pl there discussions (this.morning)
  - d. \*histaymu kan bxinot ('etmol) ended.plhere tests (yesterday)

### 4.3. Hebrew Transitive Expletives

Note now that in a departure from the specific typology put forth by Freeze (op. cit.), the existential closure by *locales* put forth here should be insensitive to any aspects of the structure which are below E, and hence, at least in principle, should be licit for any all subject roles as well as for all event types, including transitive ones. We thereby predict, rather surprisingly, the existence, in Hebrew, of transitive expletive constructions, when licensed by *locvales*: cases in which the subject is, in some sense, demoted and weak, but the structure is that of a transitive event structure nevertheless. This prediction is borne out. As the paradigm in (66)-(68) illustrates, V-S-O word orders are clearly excluded in Hebrew, regardless of whether the subject is strong or weak. The presence of temporal expressions, clitics or otherwise does not improve matters:

- 66.a. \*hipcic (kol/ha.)matos 'et ha.vir (ha.šabuva) bombed (every/the.)plane om the.town (this.week)
  - b. \*hipcic 'az (kol/ha.)matos 'et ha.vir bombed then (every/the.)plane om the.town
  - c. \*hipcic ha.šabuva (kol/ha.)matos 'et ha.vir bombed this week (every/the.)plane om the town
- 67.a. \*tiqena ('ezye/ha)poxel 'et ha.midraka (ha.boqer) fixed (some/the.)worker om the.sidewalk (this morning)
  - b. \*tiqen 'az ('ezye/ha.)po*x*el 'et ha.midra<u>k</u>a invaded then (some/the.)worker om the.sidewalk
  - c. \*tiqen 'etmol ('ezye/ha.)poxel 'et ha.midra<u>k</u>a invaded yesterday (some/the.)worker om the.sidewalk
- 68.a. \*xatku (kol/ha.)mapginim 'et ha.gader (ha.boqer) cut (all/the)demonstrators om the.fence (this morning)
  - b. \*xatku 'az (kol/ha.)mapginim 'et ha.gader cut then (all/the)demonstrators om the.fence
  - c. \*xatku 'etmol (kol/ha.)mapginim 'et ha.gader cut yesterday (all/the)demonstrators om the.fence

Consider however the same configurations in the presence of a *locale*. We find, as exactly predicted, that V-S-O word orders *are* licit, and that the subject is per force weak, in other words, precisely the diagnostics predicted by the system developed here, thereby providing striking evidence for its veracity:

- 69.a. hipcic šam (e'yze) matos 'et ha.vir (ha.boqer) bombed there (some) plane om the.town (this morning)
  - b. tiqen kan ('eyze) povel 'et ha.midraka (ha.boqer) fixed here (some) worker om the.sidewalk (this morning)
  - c. xatku šam (kama) mapginim 'et ha.gader (ha.sabuva) cut there (several) demonstrators OM the.fence (this.week) (existential; \*generic)
- 70.a. \*hipcicu šam kol/šlošet ha.metosim 'et ha.vir (ha.sa<u>b</u>uva) bombed there all/three the.planes om the.town (this.week)
  - b. \*tiqen kan ha.poxel 'et ha.midraka (ha.boqer) fixed here the.worker OM the.sidewalk (this morning)
  - c. \*xatku šam kol ha.mafginim 'et ha.gader (ha.boqer) cut there all the.demonstrators OM the.fence (this.morning)

### 5. Licensing telicity with *locales*

In section 1 I noted that two puzzles, rather than one, are associated with presentational achievements. Not only are they the only cases in which post-verbal weak subjects are licit without a licensor of some kind, they are also exceptional in allowing a telic reading without a quantity internal argument. This last observation, we noted, is true both for the intransitive achievements in (62)-(63) and for transitive achievements, as those in (12)-(14) repeated here, in essence, as (71)-(72) (and see relevant discussion in section 1 for evidence for the telicity of such cases):

- 71.a. the prospectors discovered gold
  - b. Alisha found oil
  - c. The workers struck oil
  - d. The bulldozer hit bedrock
  - e. Mary noticed ink on her sleeve
  - f. John spotted wildfowl (based on Mittwoch 1991)
- 72.a. Rina gilta zaha<u>b</u> Rina discovered gold
  - b. Rina mac'a matbevot yeqarim Rina found coins precious
  - c. Nurit hitxila proyektim xadašim Nurit started projects new 'Nurit started new projects'

We attributed the possibility of post-verbal subjects without an overt licensor in presentational intransitive achievements to the presence of a covert *locale*, which, we assumed, is associated with existential closure, in such cases, for both event (directly) and weak subject (bound by the event existentially closed by the *locale*), thereby giving rise to a presentational reading in the relevant sense. It is, of course, possible that the emergence of telicity in presentational achievements, transitive and intransitive, is unrelated to this factor and that a different account must be sought for these distinct effects. Suppose, however, that the accounts *are* related, and that it is precisely the covert *locale* present in presentational achievements that makes not only existential closure of e<sub>E</sub> possible, but also the emergence of a telic reading without a quantity argument. Effectively, the claim would then be that in both post-verbal intransitive cases with a non-quantity subject and in transitive cases with a non-quantity object it is the

covert *locale* that licenses Asp<sub>Q</sub>, the node, by assumption, responsible for the emergence of telic reading (see section 3 above for some discussion).

If true, now, we expect the same effects to be attested for overt *locales*. In other words, we expect cases which do not allow for a telic reading, in the absence of a quantity internal argument, to allow such a reading when a *locale* is present. The prediction here, we note, is uni-directional. In a given language, in a given configuration, any given locative expression may license, effectively bind,  $e_E$  alone, it may license, effectively bind, both, or it may license neither, in this latter case being an existentially inert locative expression, not a *locale* altogether, by our terminology.

While the Hebrew facts which bear on the matter are subtle, for a significant number of speakers the expected effects are, in actuality, present, as illustrated by the contrast between the obligatorily atelic cases in (73),(75) and the possibly telic ones in (74),(76):<sup>23</sup>, <sup>24</sup>

<sup>23</sup>The contrasts reported here between (73),(75) on the one hand and (74),(76) on the other hand have been confirmed by numerous native speakers. Nevertheless they do not hold for some, for whom, it appears, Hebrew *locales*, systematically, do not interact with telicity, and who interpret all utterances in (73)-(76) as atelic, and the *locales* in them purely as locatives. In turn, the failure in the lexicon some speakers to classify *locales* as binders for Asp<sub>Q</sub> is neutral, relative to the availability of such an option in UG. We note, in this context, the universal prevalence of locative particles in the licensing of telicity (e.g., the locative source of Slavic perfective prefixes, the licensing of telicity by locative particles in Hungarian, and even in English, the telic function of particles such as *up* and *down* in *eat up*, *climb down*), setting further corroboration of this universal claim aside for future research.

We do note that while *locales can* license  $Asp_Q$ , they may not do so in the absence of a DP in  $[Spec,Asp_Q]$ , to wit, no telic reading is available for the paradigms in (17)-(18). As such, then, licensing  $Asp_Q$  through *locales* is different from the classical cases in (i), where such licensing is accomplished without a DP:

- i. a. John ran to the store (in two minutes)
  - b. Rina raca la.xanut be-štey daqot Rina ran to-the.store in-two minutes

This may appear, at first sight, as evidence for the binding role of *locales* to be mediated through the argument, and not through the e node itself, be it  $e_E$  or  $e_{ASP}$ . The reader is referred, however, to Borer (2005) for considerable argumentation for rejecting this claim, as well as to argumentation bearing on the impossibility of licensing telicity through the presence of an existentially-bound (non-quantity) object. The limits on the licensing of  $Asp_Q$  by *locales*, noted here, are set aside for future research.

<sup>24</sup> Insofar as (ia.b) are available, they do give rise to a consecutive reading, as expected. However, the repetition of the *locale*, per force identical, in both conjuncts creates a sharp sense of redundancy which makes the utterances marginal at best. Without the repetition of the *locale*, the utterances become vague as relative to simultaneity:

- i. a. ?Rina šatla šam vradim ve-diqlema šam širim
   Rina planted there roses and recited there poems
   'Rina planted roses thre and then recited poems there (in three hours)
  - b. ?Ran limed po šira ¥i<u>br</u>it ve-kata<u>b</u> po proza gru¥a Ran taught here poetry Hebrew and-wrote here prose bad 'Ran taught here Hebrew poetry and <u>then</u> wrote here bad prose'

```
73.a. Michal katba
                     širim
                                 (be-mešek šloša šabvuot/*be-šloša šabuvot)
                                 (during-three weeks/*in-three weeks)
     Michal wrote
                     poems
   b. Rina
                     vradim
                                 (be-mešek šloša šabvuot/*be-šloša šabuvot)
            šatla
                                 (during-three weeks/*in-three weeks/*gradually)
     Rina
           planted
                    roses
                                    (be-mešek šloša yamim/*be-šloša yamim)
   c. Ran
            limed šira
                           vibrit
            taught poetry Hebrew (during-three days/*in-three days)
     Ran
                           širim
74.a. Michal katba
                                   (be-mešek šloša šabuvot/be- šloša šabvuot)
                     kan
     Michal wrote
                     there poems (during-three weeks/in three weeks)
   b. Rina šatla
                  eclenu
                           vradim
                                    (be-mešek šaloš šavot/be-šaloš šavot)
                                    (during-three hours/in-three hours)
     Rina planted chez.us
                           roses
   c. Ran
            limed šam šira
                                 xibrit (be-mešek šloša yamim/be-šloša yamim)
            taught there poetry Hebrew (during-three days/in-three days
     Ran
75.a. Michal katba
                     širim
                             (*be-hadraga)
     Michal wrote
                    poems (*gradually)
   b. Ran
            limed šira
                           vibrit
                                      (*be-hadraga)
     Ran
            taught poetry Hebrew
                                      (*gradually)
76.a. Michal katba
                           širim
                                      (be-hadraga)
                     kan
     Michal wrote here
                           poems
                                      (gradually)
   b. Ran
                           šira
            limed šam
                                   vibrit
                                              (be-hadraga)
     Ran
            taught there
                           poetry Hebrew
                                             (gradually)
```

I suggested that *locales* license post verbal as well as pre-verbal weak subjects by binding e<sub>E</sub> in structures such as those in (**Error! Reference source not found.**), thereby existentially closing the event. An existentially closed event, in turn, can bind its argument, thereby closing it existentially as well and thereby effectively forcing it to be weak (cf. structures in 58b-c).

Applying an identical rationale to telic structures, we note that the configuration in (58c) is syntactically, virtually identical to that of (77):

77.[ASP-Q [SPEC DPweak ] 
$$\exists_{LOCALE} \ e_{ASP-Q} \ [VP]$$
]

Specifically, if we assume that a *locale* can bind, and hence existentially close  $e_{ASP-Q}$  in a manner similar to that in which it binds and closes  $e_{9E}$ , and if we further assume that such a relation may, indeed must, translate to the relationship between the bound head, be it  $e_E$  or  $e_{ASP-Q}$  and the DP in its specifier, then it follows that in the presence of a *locale* binding  $e_{ASP-Q}$ , just as in the presence of a *locale* binding  $e_E$ , the argument must be weak. We note that the parallelism extends, beyond the picture in (58) and (77), to standard cases of  $e_E$  and  $e_{ASP-Q}$  licensing, namely those in which the node is directly licensed by its own, presumably otherwise existentially closed argument:

78. [EP [SPEC 
$$DP_{\exists\text{-closed}}$$
]  $e_E$  [TP ]]

[ASP-Q [SPEC  $DP_{\exists\text{-closed}}$ ]  $e_{ASP-Q}$  [VP ]]

An asymmetry does exist between the licensing conditions for  $e_E$  and  $e_{ASP-Q}$ , which, in actuality, is entirely consistent with the picture we are painting here. Thus at least in Hebrew, weak DP, including a quantity weak DP may not existentially close  $e_E$ , while a weak quantity DPs may existentially close  $e_{ASP-Q}$  thereby giving rise to telicity. In turn,

an account for such an asymmetry emerges directly from the different syntactic position of [Spec,EP] and [Spec,Asp<sub>Q</sub>]. The latter, we note, but not the former, may be closed existentially, when weak, by the event argument itself, if it is otherwise existentially closed by its own subject or by a *locale*. Not so an argument in [Spec,EP], which, if binding, rather than bound by, e<sub>E</sub>, has no existential closure recourses if weak. <sup>25</sup>

In Borer (2005), I argue that events do not decompose into a causing and progression, or result, subevents, and that  $Asp_Q$  is best perceived as a modifier of the event argument, and not as a subevent of its own. In turn, virtually identical licensing conditions for [ $_{EP}$   $e_E$ ] and for [ $_{ASP-Q}$   $e_{ASP-Q}$ ] may suggest that this is on the wrong track, and that the best way to view  $Asp_Q$  is nonetheless as a subevent, although, under standard assumptions concerning the existential closure of events, it is not clear why such a subevent would need to be independently existentially closed. Alternatively, it suggests that all event structure functional nodes are in need of licensing, and all their heads subject to some form of existential closure. We leave this matter for future research, ending here on this speculative note.

## 6. Conclusion

Our starting paradigms presented us with a clustering of properties: a V-S order in a language that otherwise does not allow it; a weak subject in such configurations; a possibility of licensing, that very same order, with a locative expression; and finally, the attestation, in that very same paradigm, of telicity effects in contexts which normally bar them syntactically.

As it turned out, the account, using the distribution and the properties of *locales*, both overt and covert, as its anchoring point, emerged as capable of creating the almost conspiratorial confluence of these different properties. An event argument in need of existential closure in the absence of an (otherwise existentially closed) DP in its specifier had turned out to avail itself of such an existential closure through a *locale*. The cost, however, was that, given the binding relations between  $e_E$  and its argument, was a subject itself in need of existential closure, or vacuous quantification would emerge. The extension of the system to the second event node,  $Asp_Q$ , turned out to yield a subset of the relevant properties: in the presence of a *locale* binder, telicity could emerge without a quantity object. The cost, however, was a weak object, bound in a Spec-Head configuration.

A number of matters were left for future study, primary among them the best way of characterizing the set of nodes which are subject to existential closure, and the semantic commonality between them. The study did establish, to our view conclusively, that to the extent that event argument must be existentially bound, such biding is accomplished through locative expressions, and not through temporal ones, thereby, at least in principle, promoting the existence of a propositional locative syntax, to take its prominent place, under future investigation, alongside that of the temporal one.

<sup>&</sup>lt;sup>25</sup> The reader should bear in mind that in the system developed in Borer (2005), the failure of telicity to be licensed in the presence of bare plurals and mass expressions does not follow from the fact that they are not existentially closed, but from the fact that they are not quantity expressions. Whether or not they are existentially closed is thus of little consequence, telicity wise. See fn. 23 above for some discussion that might be relevant to this point.

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