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# The progressive aspect in simultaneity as and while-clauses

La ricerca recente sulle frasi temporali inglesi introdotte da as e while indicanti simultaneità mostra che esse tendono ad essere utilizzate in modo diverso. Le frasi con as codificano solitamente eventi caratterizzati da un alto grado di suscettibilità al cambiamento mentre le frasi con while tendono ad evocare configurazioni temporali maggiormente stabili. Prendendo spunto da questo risultato, il presente contributo studia l'interazione tra l'aspetto progressivo e le frasi introdotte da as e while. Viene mostrato che l'aspetto progressivo nelle frasi introdotte da as è utilizzato prototipicamente come un meccanismo di rallentamento/allungamento (cioè un meccanismo di imperfettivizzazione). Tale meccanismo è utilizzato per stabilire un contrasto aspettuale tra l'evento di durata prolungata codificato dalla frase introdotta da as e l'evento (relativamente) puntuale codificato dalla frase principale. Di contro, le frasi introdotte da while marcate per aspetto progressivo sembrano esibire un comportamento più simile a quello delle frasi principali. Il progressivo è utilizzato principalmente come marca di transitorietà, vale a dire per segnalare che l'evento (relativamente) stabile codificato dalla frase introdotta da while è uno stato temporaneo.

# 1. The problem(s)

Simultaneity (i.e. total or partial temporal overlap) between two events can be marked explicitly in various ways. As the examples in (1a-c), (1a-b) from Biber *et al.* (1999), show connectors *as*, *while* and *when* can be used for this purpose:

- a. An armed robber was mugged of his loot as he made his getaway.
  - b. She said that the pain was a little better after the pethidine she had been given and she was able to rest quietly while she waited to be taken to theatre.
  - c. When he was in the air force he flew Tornado jets. (LDCE)

Little research has been carried out on simultaneity clauses (i.e. temporal clauses introduced by connectors such as *as*, *while* and *when*) in either English or other languages. Notable exceptions, for English, are Edgren (1971), Heinämäki (1978), Silva (1991), Morris (1996) and Declerck (1997) – see also Schmiedtová (2004) on the production of Czech simultaneity clauses by German and English learners. In particular, the differences, if any, between *as* and *while*-clauses have seldom been the topic of scholarly research (but see Broccias 2006a, 2006b). Nevertheless, some interesting claims can occasionally be found in English as a Foreign Language (EFL) manuals: e.g., Murphy (2002: 230), Swan (1995: 73), Thomson and Martinet (1986: 291-292). A couple of quotations will suffice:

[The sentence As I left the house I remembered the key] implies that I remembered the key before I had completed the action of leaving the house [...]. While I was leaving would have the same meaning here [...]. (Thomson and Martinet 1986: 291)

[...] as-clauses usually introduce less important information, and most often go at the beginning. [...] A progressive tense is usually used for the longer 'background' action or situation (was walking; are having; were playing). But as and while can be used with a simple tense, especially with a verb like sit, lie, or grow which refers to a continuous action or state. (Swan 1995: 73)

You cannot use *as* for *time* in [the following] sentences [...]. You have to use *while* or *when*:

The doorbell rang *while* we were asleep. (*not* 'as we were asleep') Angela got married *when* she was 23. (*not* 'as she was 23') (Murphy 2002: 230)

The quotations highlight at least three parameters of variation which should be considered when studying simultaneity clauses: 1) the position of the simultaneity clause with respect to the main clause; 2) the impossibility of stative *be* in *as*-clauses (vs. *while*-clauses); 3) the use of the progressive aspect in simultaneity clauses (observe, for example, that the quotation from Thomson and Martinet 1986 includes a non-progressive *as*-clause but a synonymous progressive *while*-

clause). The last dimension of variation is perhaps particularly intriguing not only for linguists but also for EFL learners; (2) is a case in point:

(2) That's, that's right, it's being updated now even **as** we **speak**. (BNC: KRT 6614)<sup>1</sup>

Since EFL learners are usually taught that the progressive form is used in connection with on-going, temporary actions or states, they (and linguists alike) may wonder why the simultaneity *as*-clause in (2) contains the present simple form of the verb *speak* rather than the progressive form *are speaking* (as is actually the case for *update* in the main clause). The lack of the progressive form in *as*-clauses such as (2) does not seem to be casual. The whole BNC contains 20 instances of *as we speak* but none of *as we are speaking*, for example.

This paper intends to shed some light on the use of the progressive aspect in simultaneity clauses by relying on authentic material (mainly extracted from the BNC). In order to do so, however, I will first have to deal with the issue concerning the impossibility of stative be in asclauses, i.e. the second parameter of variation mentioned above. This topic has in fact already been tackled in Broccias (2006a, b) but, since it is of fundamental importance for the analysis of the progressive aspect put forward in this paper, it must be summarised here as well (see Section 2). The following section, Section 3, discusses the use of the progressive form in simultaneity as and while-clauses, see Sections 3.1 and 3.2 respectively. The progressive form in the former is shown to function as a "slow motion" or imperfectivizing marker (e.g. to stretch the temporal profile of the as-event) and to establish an aspectual contrast with the main clause event. The progressive form in whileclauses, by contrast, is argued to be an explicit transience marker. For the sake of completeness, I will also comment on the remaining parameter mentioned above, the positioning of simultaneity clauses vis-

<sup>&</sup>lt;sup>1</sup> BNC stands for British National Corpus (see http://www.natcorp.ox.ac.uk/ for more information). The combination of letters and numbers following BNC in parentheses specifies the location of the relevant quotation in the corpus. The data used in this paper has been collected using the web-version of the BNC, i.e. the BNCWeb (http://escorp.unizh.ch), accessed through the (old) BNCWeb Query System.

à-vis main clauses. The main conclusions of this paper are summarised in the last section, Section 4.

# 2. The schematic meanings of as and while

In a previous paper (Broccias 2006a) I studied whether collocational differences exist between *as* and *while*-clauses in the written language by using the imaginative written subcorpus of the BNC.<sup>2</sup> 241 examples were randomly selected which contain *as* tagged as a subordinating conjunction (i.e. CJS). An identical number of examples was also randomly selected for *while* (i.e. *while* was tagged as a CJS).<sup>3</sup> The data thus obtained, which is summarised in Tables 1 and 2, show that temporal *as*, but not temporal *while*, very often occurs with change verbs (72% of all simultaneity *as*-examples vs. 21% of all simultaneity *while*-examples).

change verbs		non-change verbs	
change of position	change of state	stative*	others
62 (62.0%) 10 (10.0%)		13 (13.0%)	15 (15.0%)
72.0%		28.0%	

<sup>\*</sup> Stative includes verbs of keeping, posture verbs, verbs of watching and reflecting

Table 1. Verb types occurring in simultaneity as-clauses

<sup>&</sup>lt;sup>2</sup> The label "imaginative written" is one of the domains into which the BNC has been divided (the others are "natural and pure sciences", "applied science", "social science", "world affairs", "commerce and finance", "arts", "belief and thought" and "leisure"). The choice of this domain was simply due to the fact that more simultaneity *as* and *while*-clauses (both numerically and in terms of types) are expected here. This domain lends itself to the description of simultaneous events more than the others do.

<sup>&</sup>lt;sup>3</sup> In fact, in that study I also analysed the leisure spoken subcorpus. Given the paucity of examples found there (both quantitatively and in terms of types) and the fact that the (few) data are somewhat similar to the written ones, I have ignored this part of the analysis for the present purposes. Notice, however, that 241 is the number of all *while*-examples (with *while* tagged as a CJS) in the leisure spoken subcorpus. Hence, I decided to use an identical number of items in all other cases. It should be pointed out that not all instances of *as* and *while*-clauses where *as* and *while* are parsed as CJS are necessarily temporal clauses (they might simply be causal clauses if *as* is used and they might be concessive clauses in the case of *while*). This explains why the totals for *as* and *while*-clause examples do not add up to 241. The same observation also applies to the data analysed in Section 3 below.

change verbs		non-change verbs	
change of position	change of state	be	others
31 (17.4%) 6 (3.4%)		34 (19.1%)	107 (60.1%)
20.8%		79.2%	

Table 2. Verb types occurring in simultaneity while-clauses

Table 3 shows that *as* and *while*-clauses differ in other respects. Subjects of *as*-clauses are identical to main clause subjects much more often than subjects of *while*-clauses (see *same subject* row in Table 3). Also, main clause events seem to be construable as punctual events much more frequently if *as*-clauses are used. However, both *as* and *while*-clauses seem to favour final positioning (i.e. they tend to be placed after the main clause), contrary to what is claimed by Swan (1995).<sup>4</sup>

	as-clauses	while-clauses
same subject	54%	21%
punctual main clause	46%	19%
initial vs. final	33% vs. 64%	20% vs. 77%

Table 3. Further differences and similarities between as and while-clauses

Two representative examples, illustrating contrasting options, are given in (3):

- (3) a. As <u>she</u><sub>i</sub> let herself out into the garden through the kitchen door, <u>she</u><sub>i</sub> gave a small shiver that had absolutely nothing to do with the autumnal chill in the air. (BNC: H8F 1708)
  - b. [...] and <u>he</u><sub>i</sub> had to wait, fidgeting his hands while <u>the Rector</u><sub>j</sub> talked on. (BNC: AD1 3278)

<sup>&</sup>lt;sup>4</sup> The figures in Table 3 should of course be treated cautiously because the choice of certain matrix verbs may bear on the positioning of the simultaneity clause. For example, main clause watch requires a final temporal clause, e.g. The rector [...] watched her as she fetched a vase and arranged the freesias (BNC: ASE 1935).

- (3a) contains an initial *as*-clause (i.e. the less frequent positional pattern) whose subject, as in most cases, is identical to that of the main clause. It should be pointed out at this juncture that "same subject" cases also include those examples where a part-whole relation holds between the subject of the *as*-clause and the subject of the main clause. For example, (4) below:
  - (4) **As** they were returning, Grégoire grew quiet and thoughtful. (BNC: C8S 871)

is categorised as a same subject example because Grégoire is a member of the group of people referred to by *they* in the *as*-clause. A second important point concerns the position of simultaneity clauses. The total percentage for both *as* and *while*-clauses in the position row in Table 3 is not 100% because some examples, like (5), cannot be classified as being either initial or final (such cases are ignored in the present analysis):

(5) "Better that than a coffin," he whispered, adding **as** he leaned in to retrieve his fiddle: "And if my coffin is half as comfortable 'tis a smooth journey I'll be having to Paradise." (BNC: FRJ 256)

Since the *as*-clause in (5) occurs between *add* – which is not a main clause verb, incidentally – and its direct object, I preferred to discard such cases in my tally of initial vs. final simultaneity clauses.

Going back to (3a), we also observe that this example contains a punctual main clause predicate (*give a small shiver*). (3b), by contrast, contains a non-punctual main event (*wait*) as well as an extended temporal *while*-event (*talk on*). The *as*-event in (3a), on the other hand, is virtually punctual (since crossing a kitchen door is obviously almost instantaneous).

A further general difference between *as* and *while*-clauses has to do with the fact that simultaneity *while* can occur with stative *be*, modals and negated verbs but *as* cannot (see also Section 1):

(6) a. Instead, he eats his sausage {while/\*as} it's still warm. (Faber 2003, p.133)

- b. 'Because I must do *something* {while/\*as} I still can. [...]' (Faber 2003, p. 182)
- c. Fat lot of use I'd be to any girl {while/\*as} I don't have a job. (BNC: FRR 572)

In previous studies (Broccias 2006a, b) I argued that a usage-based approach can satisfactorily handle these facts. In those contributions I suggested that English speakers do not seem to extract a maximally abstract as-schema from specific occurrences of simultaneity asclauses. This would be a schema where any kind of verb is possible in the as-clause so that as could be said to be a "true" temporal conjunction. English speakers know that as can be used in simultaneity constructions (i.e. they have a schema for simultaneity constructions where as fills the subordinating conjunction slot) but do not take the further step of allowing the verbal slot to be maximally schematic, i.e. compatible with any verb. This abstraction process may be hindered (at least in contemporary English) by the polyfunctional nature of as, which occurs in various different constructions (temporal constructions, causal constructions, comparative constructions, etc.). By contrast, I hypothesised the existence of a maximally schematic construction for simultaneity while-clauses, i.e. a schema where the verbal slot can be filled by any kind of verb. Hence, while is probably stored as a truly temporal conjunction in native speakers' minds (cf. also the temporal use of the noun while, as in for a while). The difference between as and while is illustrated, in a hopefully selfexplanatory and non-technical way, in (7) (a simplified version of the contrast in 6a).

(7)		temporality	temporality
	a.	as	it is warm
		[not marked]	[stative, i.etemporal]
	b.	while	it is warm
		[+temporal]	[stative, i.e. –temporal]

If a stative predicate like *be warm* is used in an *as*-clause, temporality (i.e. "susceptibility to change" in the sense of Williams 2002) cannot be recovered because *as* is not stored in the English

lexicon as a temporal conjunction on its own. As must combine with predicates that evoke a (relatively) high degree of susceptibility to change, hence the preference for change of state/position verbs reported in Table 1.<sup>5</sup> By contrast, *while* contributes a "temporal exponent" by itself and can thus combine with stative *be*, which does not signal susceptibility to change on its own. This observation motivates why *while*-clauses do not exhibit any strong preference for change verbs: temporality can be recovered by default thanks to the very nature of *while* as a temporal subordinator.

To conclude, *as*-clauses combine with events that have a (relatively) high potential for change. *While*-clauses, by contrast, evoke more stable configurations and do not necessarily point to impending change (the reader is referred to Broccias 2006b for more details on this point).

# 3. Progressive aspect and simultaneity clauses

Having offered an account of the impossibility of stative *be* in *as*-clauses (and of the related issue concerning the preference for change verbs in *as*-clauses), we can now move to the analysis of simultaneity clauses marked for progressive aspect. As before, I collected my data from the imaginative written subcorpus of the BNC but I first increased the number of randomly selected CJS *as/while* examples from 241 to 1000. The results of this preliminary analysis are summarised in Tables 4 and 5.

simultaneity examples	marked for progressive	just as + progressive
475 (47.5%)	15 (3.2%)	5 (out of 15)

Table 4. Simultaneity *as-*clauses marked for progressive aspect (1000 sample)

<sup>&</sup>lt;sup>5</sup> On the reason why stative predicates other than *be* (e.g. *lie*, *sit*, *stand*) are possible in *as*-clauses, as is shown in Table 1, see Broccias (2006b). In that paper I argue that verbs like *lie* and *sit* have a high potential for change (i.e. they evoke susceptibility to change) when used in *as*-clauses because they are usually predicated of animate beings (e.g. *The wind whips round us as we stand on the seafront*, Morrall 2003: 281). That is, they describe temporary configurations in our daily routine, in which we may frequently move from one to another.

simultaneity examples (excl. while -ing)	
~	marked for progressive
simultaneity examples (excl. while -ing, BE/MOD/NEG)	
733 ~ 600 (73.3% ~ 60.0%)	110 (15.0% ~ 18.3%)

Table 5. Simultaneity *while*-clauses marked for progressive aspect (1000 sample)

Tables 4 and 5 show that the percentage of simultaneity clauses out of a 1000-case sample is much higher for while-clauses than as-clauses (up to 73.3% for the former vs. 47.5% for the latter). Two figures are offered for while-clauses in general, i.e. 73.3% and 60%, and progressive-marked while-clauses in particular. Both exclude cases where while is immediately followed by a gerund (e.g. "a research trip through Eritrea which he made in 1987 while gestating his new book Towards Asmara", BNC: A3R 134). This choice has been motivated by the fact that a corresponding as + gerund pattern is impossible. Similarly, as was pointed out in connection with (6) above, stative be, BE in Table 5 (but see also note 6), modalised (MOD) and negated (NEG) predicates are only possible in while-clauses. Hence, a second figure is provided for while-examples which collectively accounts for such cases. Both figures, however, show that the percentage of progressive while-clauses is low although it is not as low as that of progressive as-clauses. Progressive asclauses are roughly 5 times less frequent than while-clauses. It is also worth pointing out that in a third of the progressive as-examples (5 out of 15) as is preceded by *just* (see Section 3.1 below for more details).

The difference in the percentage of progressive *as* and *while*-clauses is of particular interest because *as*-clauses show a strong preference for change verbs (see Table 1 above) and one might expect change verbs to easily trigger the use of the progressive form (since they signal, like the

<sup>&</sup>lt;sup>6</sup> The figures for simultaneity *as*-examples also include the (very rare) pattern with stative *be* illustrated in (i) (of which only two examples were found):

<sup>(</sup>i) [...] and, **as** he **was** there **standing**, he hoisted her up [...]. (BNC: FP1 209) where a "pseudo-progressive" construction, so to speak, is used. Still, this case and similar examples like (ii):

<sup>(</sup>ii) As I sat in the graceful room looking at Mrs Rumney [...] I couldn't help feeling how right and fitting the whole scene was. (BNC: G3S 1070)were not categorised as progressive examples, of course.

progressive form, transience par excellence). Despite this, we observe that *while*-clauses, which do not exhibit any preference for change verbs, are in fact used more frequently in the progressive than *as*-clauses.

In order to offer a statistically more reliable analysis of progressive simultaneity clauses. I decided to increase my samples of progressive examples for both as-clauses and while-clauses. In the former case, I randomly selected (from the imaginative written subcorpus of the BNC) 20,000 examples where as is tagged as a CJS and then sorted them (automatically) so as to isolate only those examples where the third word after as was a VVG (i.e. an -ing form). This procedure resulted in 352 hits, of which only 167 were classified (manually) as simultaneity examples. In the case of while-clauses, I selected all examples available in the written imaginative subcorpus where while is marked as CJS (i.e. 4,925 examples) and I sorted them automatically so as to isolate only those examples where the third word after while was a VVG. This resulted in 325 hits, of which only 287 were classified (manually) as simultaneity examples. 8 These results are discussed in some depth in the next two subsections: Subsection 3.1 discusses progressive as-clauses and Subsection 3.2 deals with progressive while-clauses.

# 3.1. Progressive as-clauses

A detailed breakdown of the results obtained for progressive asclauses is offered in Tables 6 and 7. Table 6 gives the total number of progressive as-clauses (i.e. 167) as well as the number of as-clauses (out of 167) where as is preceded by a modifying adverbial, i.e. just or even, since I also wanted to have some preliminary indication as to whether these adverbials bear on the selection of the progressive form. The table also provides information regarding the positioning of the as-clause and whether the subject of the as-clause is identical to that of the main clause (the caveat about part-whole relationships, see Section 2, also applies

<sup>&</sup>lt;sup>7</sup> This means that the word immediately following *as* was either a pronoun or a proper noun. Note also that VVG includes any *-ing* verb with the exception of *being*, *doing* and *having* (see below in the text for more details). Of course, I cannot exclude that the use of pronominal or proper noun subjects may somehow affect the use of the progressive aspect (although I cannot see why this should be the case). Future research should address this issue.

<sup>&</sup>lt;sup>8</sup> The automatic procedure actually produced 326 hits, of which one had to be discarded because it was not properly linked to a text passage in the BNC. Hence, I had to use 325 examples.

here). I would like to reiterate that the total number of initial and final *as*-clauses (i.e. 160) is less than the total number of simultaneity *as*-clauses (i.e. 167) because a few examples contain *as*-clauses which cannot be said to occur either before or after a main clause (see Section 2).

simultaneity	just as	even as	initial vs. final	same subject
167	42 (25.1%)	4 (2.4%)	79 (47.3%) vs. 81 (48.5)%	55 (32.9%)

Tables 6. As-clauses with VVG forms in third position (20000 sample)

Table 7 lists the event types occurring in the progressive *as*-clauses as well as the number and percentage of cases where the main clause event is construable as a punctual event (this data is commented on below after Table 10). Note that some of the event types listed in Table 7 as being coded by *as*-clauses are given by way of verbs in small capitals (e.g. STAND). Such labels stand for semantic fields and thus group various different verbs (e.g. posture verbs like *stand*, *lie*, and *sit* in the case of STAND). It should also be pointed out that the percentages given in parentheses next to the figures for main clause events construable as punctual events in the right-hand column are relative to the corresponding *as* event types listed in the left-hand column (e.g. the first percentage, 80%, in the right-hand column means that 80%, i.e. 68, of the main clauses used when the *as*-event is of the change-of-place type are construable as punctual).

as event type		main clause events construable as punctual
change of place	85	68 (80.0%)
change of state	32	27 (84.3%)
(i.e. change	70.0%)	
EAT	5 (3.0%)	4 (80.0%)
REFLECT	5 (3.0%)	5 (100%)
sound emission	11 (6.6%)	6 (54.5%)
STAND	1 (0.6%)	0 (0.0%)
TRY	5 (3.0%)	4 (80.0%)
WAIT	3 (1.8%)	2 (66.7%)
WATCH	6 (3.4%)	4 (66.7%)
others	14 (8.4%)	11 (78.6%)
TOT.	167	131 (i.e. 78.4% of all cases)

Table 7. Event types in progressive *as*-clauses and their relation to punctual main clauses

Further details are provided in Tables 8 and 9. Table 8 includes information regarding the types of tense/aspect/modal used in the main clause and clearly shows that the overwhelming majority of examples uses a simple tense form in the main clause.<sup>9</sup>

simple tense (only)	perfect (only)	progressive (only)	modalised*
147 (88%)	5 (3%)	3 (2%)	7 (4%)

<sup>\*</sup> i.e. modal verbs are used (but this figure also includes manage to)

Table 8. Tense/aspect/modals in main clauses when progressive as-clauses are used

A representative example is (8) below.

(8) **As** she **was** approach**ing** she **saw** his head turn slightly in awareness of her, which meant that there was no going back. (BNC: GW0 100)

The use of perfect and progressive forms in the main clause, see (9) and (10) respectively, is very rare. This is also true for main clause verb groups where a modal is used (see (11)).<sup>10</sup>

- (9) He **had** stopped her **as** she **was** walk**ing** solemnly round the small onyx coffee tables, among the guests. (BNC: FPH 3504)
- (10) Denis was trying to comfort Carmella as she was sobbing in the pew. (BNC: ATE 342)
- (11) Their brakes **must** have locked **as** they **were** com**ing** down the slope, for there was a twenty-yard slice of chocolate loam where their wheels had scoured the turf. (BNC: FR3 1417)

<sup>&</sup>lt;sup>9</sup> The total number of main clauses reported on in Table 8 is less than 167 because in a few cases it was questionable how to categorise the main clause, as in (i):

<sup>(</sup>i) ["How will you explain Scamp?"] "Hit-and-run as he was chasing me [...]." (BNC: HW8 3389)

<sup>&</sup>lt;sup>10</sup> Cases like (11) are treated as modal cases only and are not also listed under "perfect" in Table 8. In other words, the simple tense, perfect and progressive cases reported in Table 8 only refer to those instances where no modals are used.

For the sake of completeness, Table 9 details the seven additional cases (out of the 352 hits) where the third word after *as* is a progressive form other than VVG (see also note 7), i.e. *being* (VBG), *doing* (VDG) and *having* (VHG).

	no. of examples	punctual main clause	main clause tense
VBG	4	1	3 simple tense + 1 modalised
VDG	2	2	2 simple tense
VHG	1	1	0 (i.e. infinitive used)

Table 9. Progressive as-clauses whose verbs are not of the VVG type

A summary of all the data thus collected is offered in Table 10 (which includes both the 167 VVG examples and the 7 non-VVG progressive examples mentioned in the previous table).

simultaneity cases	initial vs. final position of as-clause	change event used in <i>as</i> -clause	same subject in <i>as</i> and main clause	punctual main clause event
174 (out of 376)	82 vs. 85	119 (68%)	57 (33%)	135 (78%)

Table 10. Summary of findings relative to progressive as-clauses

Various interesting points can be made on the basis of the data in Table 10. First, progressive *as*-clauses, unlike *as*-clauses in general (see Table 3), do not exhibit any preference for final positioning. They seem to occur in equal measure both before and after main clauses. This can be interpreted as a tendency to use the final position more often than in the general case. Second, there is no significant difference in the percentage of change verbs used in *as*-clauses with respect to the general picture outlined in Table 3 (p  $\approx$  0.05).<sup>11</sup> That is, progressive *as*-clauses often occur with change verbs too. Third, there is a significant decrease in the number of identical subject cases (p  $\approx$  0.02). Finally,

<sup>11</sup> All measures of significance were obtained using the chi-square test.

most main events are punctual when progressive *as*-clauses are used and they are coded through a simple tense (i.e. present or past simple). The difference with the general case (vis-à-vis punctuality) is highly significant ( $p \approx 0.004$ ).

These observations allow us to view (at a sufficiently high level of schematicity) the progressive *as*-clause as a subtype of *as*-clause used to prototypically code an aspectual opposition between an extended *as*-event and a punctual main event, as in (8) above. The use of the *-ing* form in *as*-clauses can often be regarded as a "stretching" or "slowing down" mechanism. The progressive form can be used to extend the temporal profile of an event which may otherwise be felt to be too short if the main clause event is to be contained in it. In (8) above, for example, the (relatively) punctual event of seeing is contained within the approaching event, whose temporal profile is stretched or slowed down by the use of the progressive so that the approaching event can accommodate the seeing event. Two more examples, not from the BNC, illustrating this point are offered in (12)-(13) below.

- (12) But **as** she **was** introduc**ing** herself she **was interrupted** by Michael Beale [...]. (Heller 2003, p. 21)
- (13) Minutes later, **as** he's strok**ing** her goodbye, she **kisses** his fingers, and says [...]. (Faber 2003, p. 269)

Observe that punctuality is a matter of construal relative to the *as*-event. In (13), for example, the kissing event is not, objectively, a punctual event but can be assumed to be (much) shorter in its temporal extension than the stretched *as*-event.

Importantly, the stretching function attributed to the use of the *-ing* form can also occur when a (by default) non-punctual event is used in the *as-*clause. This is the case of *walk* in (14) below, which speakers may by default take as referring to a temporally non-negligible event. Nevertheless, (14) does conform to the general characterization of progressive *as-*clauses advanced here. The walking event is intuitively "slowed down" by the use of the progressive aspect so as to establish an aspectual contrast with the punctual main clause event (i.e. *catch a glimpse*).

(14) Once, **as** they **were** walk**ing** down St Martin's Lane together [...] she **caught** a glimpse of their rippling reflection in a shop window. (Heller 2003, p. 118)

The slowing down/stretching function of the progressive form in simultaneity as-clauses can of course be analysed as an instance of Langacker's notion of imperfectivization (see e.g. Langacker 1991: 208-211), which Langacker regards as one of the essential ingredients in the semantic characterization of progressive aspect (at least as far as main clauses are concerned). 12 He claims that an imperfective process is such that its endpoints are ignored by the conceptualiser (i.e. we view the process from an internal perspective). However, the view of (English) progressive aspect in main clauses as an imperfectivizing mechanism is not accepted universally. Other scholars, e.g. Williams 2002 and Declerk 1991 among many others, regard susceptibility to change, rather than imperfectivity, as the crucial element in the conceptual definition of English progressive aspect (at least in the case of main clauses). They claim that the progressive signals that a certain event is about to change or, more generally, has a high potential for change. A detailed discussion of the two alternative views (imperfectivization vs. susceptibility to change) is obviously beyond the scope of this paper. Still, I believe that the two characterisations are not mutually exclusive - we should avoid falling into what Langacker (1987) calls the omnipresent "exclusionary fallacy" (i.e. one explanation necessarily excludes another) - but rather highlight different (though related) aspects of the same conceptualisation. The progressive (in main clauses) signals both transience and imperfectivity in that it is mainly used to describe temporary (i.e. transient) states (i.e. imperfective or continuous states of affairs).

Although imperfectivization and susceptibility to change are probably the two sides of the same coin, this does not seem to be overwhelmingly the case in simultaneity *as*-clauses. The notion of susceptibility to change does not seem to figure prominently when one has to motivate the use of the progressive aspect in *as*-clauses. As was

<sup>&</sup>lt;sup>12</sup> In more detail, Langacker (1991: 209-210) claims that the use of the *-ing* morpheme (i) imposes summary scanning (on this issue see also Broccias and Hollmann forthcoming), (ii) restricts the immediate scope of predication provided by the verb the *-ing* morpheme combines with (by excluding the endpoints of the verbal process) and (iii) construes the profiled states of the verbal process as equivalent.

pointed out at the very beginning of this paper, see example (2), the progressive form is not always used in *as*-clauses, even when one might naively expect it to occur. One more example is given in (15), where the progressive aspect is only marked in the main clause:

#### (15) My hand is shaking as I write. (BNC: AE0 1414)

When the progressive form is used in a simultaneity *as*-clause, its major contribution seems that of slowing down or stretching the *as*-event so as to establish an aspectual contrast between the *as*-event and the (relatively) punctual main clause event (by e.g. building up a sufficiently temporally extended frame in which to inscribe the punctual main clause event).

It is also interesting to observe that a fair amount of progressive as-clauses (between 30% and 25%, see Tables 5 and 6) are preceded by just. Since just as intuitively forces the speaker to focus on a portion of the simultaneity clause process (i.e. to take an internal perspective on it), the occurrence of the progressive form may be expected. By contrast, even does not seem to have a comparable effect (only slightly more than 2% of the progressive as-clauses contain even, see Table 6). To be sure, just as cases deserve further attention in future research.

Syntactically, the progressive *as*-clause correlates with an increased use of the initial position. Further research is needed to shed light on this point, but the increase in initial positioning may be related to the fact that, at least intuitively, a contrast between an extended event and a punctual event is perhaps most effective if the extended event is introduced into the discourse before the punctual event (i.e., in cognitive linguistic terminology, the ground is provided before the figure is introduced). Finally, since the progressive *as*-clause mainly functions as a(n aspectually) contrastive background with respect to the (relatively punctual) main clause, a decrease in the number of identical subject cases may not be surprising after all. Whereas *as*-clauses, in general, very often rely on the existence of tight links with the main clause (established by sharing the same subject), progressive *as*-clauses, by virtue of their typically contrastive function, may be expected to relax the need for such tight links with the main clause. Different subjects in

the two clauses increase the potential for a contrastive construal. Nevertheless, tight conceptual links between the progressive *as*-clause and the main clause are still guaranteed by the fact that the main clause event is construed as being contained within the *as*-event.

# 3.2. Progressive while-clauses

The results of the analysis of progressive *while*-clauses extracted from the imaginative written subcorpus of the BNC are reported in Table 11 to Table 15 below. Since these tables are very similar in fashion to those used for progressive *as*-clauses, I will not comment on them in much detail. Rather, I will concentrate at the end of this subsection on the general conclusions that can be drawn from the data thus collected.

Table 11 details how many progressive simultaneity *while*-clauses, with VGG as the third word following *while*, were found in the sample of *while*-clauses considered (i.e. 4,925 examples). It also shows in how many of the 287 simultaneity cases *while* is preceded by an adverbial element (such as *at least*, *even*, etc.). Since such cases are very few (unlike the *just as* examples briefly mentioned in the preceding section), they will not be discussed here – they have been included in Table 11 for the sake of completeness. Table 11 also shows that progressive *while*-clauses favour final positioning and that the frequency of same subject cases is not very high.

simultaneity	X + while		initial vs. final	same subject
287	at least	1	112 (39.0%) vs. 153 (53.3%)	76 (26.5%)
	even	3		
	especially	1		
	not	3		

Table 11. While-clauses with VVG forms in third position (4925 sample)

Table 12 offers a breakdown of the event types found in the progressive *while*-clauses and specifies how many of the corresponding main clauses can be construed as punctual. A comparison with Table 7,

which provides the same type of information for *as*-clauses reveals some important differences. Change verbs are used much less frequently in progressive *while*-clauses (21.6% vs. 70%). Stative verbs by contrast are more frequent (e.g. STAND verbs amount to 8% for *while*-clauses but just 0.6% for *as*-clauses) and, in general, more verb types are used in *while*-clauses (see the category *others*, which amounts to 8.4% for *as*-clauses but scores 40% for *while*-clauses). Progressive *while*-clauses, like *while*-clauses in general, therefore seem to combine with more temporally stable event types than progressive *as*-clauses (see Section 2). Finally, the percentage of main clause events construable as punctual events is less than half that of *as*-clauses (i.e. 33.8% vs. 78.4%).

while event t	ype	main clause event construable as punctual		
change of place 34		19 (55.9%)		
change of state	28	11 (39.3%)		
(i.e. change	21.6%)			
EAT	10 (3.5%)	2 (20.0%)		
REFLECT	14 (4.9%)	4 (28.6%)		
sound emission	28 (9.8%)	7 (25.0%)		
STAND	23 (8.0%)	8 (34.8%)		
TRY	6 (3.6%)	2 (33.3%)		
WAIT	16 (5.6%)	7 (43.8%)		
WATCH	13 (4.5%)	2 (15.4%)		
others	115 (40.0%)	35 (30.4%)		
TOT.	287	97 (i.e. 33.8% of all cases)		

Table 12. Event types in progressive *while*-clauses and their relation to punctual main clauses

Table 13 shows that there is a considerable decrease in simple tense forms in main clauses when *while*-clauses are used as compared to *as*-clauses (i.e. 50% vs. 88%), see Table 8, and a corresponding increase especially in modalised cases (i.e. 25% for *while*-clauses vs. 4% for *as*-clauses).

simple tense (only)	perfect (only)	progressive (only)	modalised
143 (50%)	26 (9%)	27 (9%)	73 (25%)

Table 13. Tense/aspect/modals in main clauses when progressive while-clauses are used

Four representative examples for the four cases considered in Table 13 are provided, in that order, in (16) to (19).

- (16) [...] and **while** they **were** bowl**ing** along into the country, with a beautiful view of the landscape, Matthew **explained** the history of the school forest. (BNC: J54 2679)
- (17) She'd lost track of it while she was dealing with Anna. (BNC: FSG 2614)
- (18) While Doug was talking she was wondering how Steven was managing. (BNC: H9W 2938)
- (19) It **would** involve crawling out of a window **while** nobody **was** looking [...]. (BNC: EE5 1330)

For the sake of completeness, Table 14 offers a breakdown of the other non-VVG progressive *while*-cases (i.e. *being*, *doing* and *having*).

	no. of examples	change verbs	punctual main clause	main clause tense
VBG	11	4	2	3 simple tense
VDG	17	0	3	3 simple tense
VHG	9	0	4	3 simple tense

Table 14. Progressive while-clauses whose verbs are not of the VVG type

The main results of the analysis of progressive *while*-clauses are summarised in Table 15 (see the corresponding Table for *as*-clauses, i.e. Table 10).

simultaneity cases	initial vs. final position of while-clause	change event used in while-clause	punctual main clause event	same subject in while and main clause
324 (out of 352)	127 vs. 172	66 (20%)	106 (33%)	88 (27%)

Table 15. Summary of findings relative to progressive *while*-clauses

Progressive while-clauses favour initial positioning, although the difference with final positioning is not significant. What is significant is however the difference with the general case illustrated in Table 3. The use of the progressive form can be said to trigger a more frequent use of the initial position. The second point emerging from the present analysis is that progressive while-clauses behave in the same way as while-clauses in general when verb types and identical subject cases are taken into account. Finally, unlike progressive as-clause examples, progressive while-clauses do not show any strong preference for punctual main clause events. Still, the 10% difference between punctual main clauses when progressive while-clauses are used and when while-clauses are considered in general, may lead us to conclude that there is a tendency to employ the progressive form in the while-clause when a punctual event is evoked by the main clause.

All in all, progressive *while*-clauses do not differ significantly from the general case although one may observe a tendency both to favour initial positioning (with respect to the general case) and to use the progressive form to code a difference in temporal extension with respect to the main clause (i.e. the main clause event is punctual more frequently than in the general case). Since however this tendency is not a very strong one (i.e. it is not statistically significant) we may conclude that there is no entrenched abstract schema for the progressive *while*-clause which captures a contrast in aspectuality between the simultaneity clause and the main clause (or, at least, the level of entrenchment of such a schema is lower than that for progressive *as*-clauses). Since imperfectivity (i.e. the use of the *-ing* morpheme as a slowing down/stretching mechanism) is not as relevant to progressive *while*-clauses to the same degree as in *as*-clauses, we may infer that the other "side" of English progressive aspect, i.e. susceptibility to change,

plays a much more important role in progressive *while*-clauses. Importantly, since the notion of susceptibility to change can be invoked to explain most progressive patterns in main clauses – although I pointed out that perhaps, more cautiously, we should regard both imperfectivity and susceptibility to change as essential ingredients in the conceptual characterization of main clause progressive forms – we could conclude that progressive *while*-clauses behave more similarly to progressive main clauses than progressive *as*-clauses do. It is also interesting to mention in this respect that *while*-clauses exhibit a richer inventory of tense/aspect/modals than *as*-clauses (see Table 13), which gives additional weight to the hypothesis that *while*-clauses are more similar to main clauses than *as*-clauses are.

In a nutshell, the progressive marker in *while*-clauses may be used primarily to signal transience explicitly (as is done in main clauses) rather than to (mainly) evoke an aspectual contrast by stretching or slowing down the *while*-event. Such observations tie in well with the finding, for example, that the progressive is used more frequently with *while*-clauses than *as*-clauses. The fact that the *-ing* form is recruited to signal transience may be due to the fact that *while*, although a transience marker by itself (see Section 2), usually occurs with non-change verbs. Hence, the *-ing* form may be used to mark the transient nature of such events explicitly.

#### 4. Conclusion

Progressive simultaneity *as* and *while*-clauses occur infrequently in the corpus examined, i.e. the written imaginative subcorpus of the BNC. This should not be too surprising. Narrative texts use more often than not present or past simple forms (see e.g. the data reported in Biber *et al.* 1999: 461, but note that they do not discuss possible differences between main and subordinate clauses). To be sure, a detailed analysis of the spoken language and other written genres is needed to test this finding across different modes and should therefore be the focus of future research.

A tendency was also observed to avoid progressive aspect marking in both the main clause and the simultaneity clause, especially if an *as*-

clause is employed. In a sense, double aspectual marking may be seen as redundant (if progressive aspect is already marked in the main clause). Indeed, more elaborate tense/aspect forms are avoided in other types of subordinate clause, especially when tight conceptual links exist between the matrix clause and the subordinate clause. For example, Collins Cobuild English Usage (p. 267) notes that the present simple, rather than the periphrastic form with modal will, is used in a defining relative clause when the main clause clearly refers to a future event (e.g. Any decision you make will need her approval). And this is also the case with whenclauses (see Declerck 1997) and future-referring if-clauses. Still, we have observed that in some cases the progressive aspect can be marked in the simultaneity, rather than main, clause. This has been prototypically interpreted, in the case of as-clauses, as a stretching/slowing down mechanism which results in an aspectual contrast being established between the as-event and the (relatively punctual) main clause event. By contrast, it has been argued that progressive aspect is probably used in a way more reminiscent of its function in main clauses (i.e. as a transience marker) when while-clauses are used. The difference in the use of progressive aspect in simultaneity as and while-clauses may be taken as symptomatic of a higher degree of semantic integration between asclauses and main clauses than between while-clauses and main clauses – if we accept that while-clauses are more similar to main clauses with respect to progressive aspect selection, of course. 13

The schematic characterisation offered for progressive *as*-clauses neatly accounts for the absence of the progressive marker in examples such as (2) and (15) above, which I have reproduced here for ease of reference:

- (2) That's, that's right, it's being updated now even **as** we **speak**. (BNC: KRT 6614)
- (15) My hand is shaking as I write. (BNC: AE0 1414)

Since progressive aspect is already marked in the main clause, we do not (usually) expect it to also occur in the *as*-clause. Further, there is no

<sup>&</sup>lt;sup>13</sup> On the existence of tight conceptual links between *as-*clauses and main clauses see also Silva (1991: 648).

aspectual contrast intended in either (2) or (15). The updating process unfolds together with the speaking event rather than being contained in it. Similarly, the hand's shaking is temporally coextensive with the writing event. The main clause events are not construed as punctual events and, hence, there is no need to stretch the *as*-clause events; speaking and writing have by-default non-negligible temporal profiles.

The present analysis has therefore revealed that progressive aspect in simultaneity clauses is not necessarily used in the same way as in main clauses especially as far as *as*-clauses are concerned. Notions like redundancy (in aspectual marking) and aspectual opposition seem to play an important role in determining when and where the progressive form is used.

Ultimately, the choice of whether a progressive marker should be employed or not is a matter of construal. The same verb can occur both with and without a progressive marker, as the following pair nicely illustrates:

- (20) The Germans were getting out of the city, blowing up bridges as they left. (Ondaatje 1993, p. 60)
- (21) **As** I **was** leav**ing** I saw a mirror tacked up high against the skin wall [...]. (Ondaatje 1993, p. 138)

It is worth stressing that the positioning of the simultaneity clause – (20) and (21) differ in this respect – does not seem to have much impact on the use of the progressive form. Progressive as-clauses are slightly more frequent in final position, see Table 6, and final progressive while-clauses are more frequent than initial progressive while-clauses by over 10%, see Table 11. Since the progressive form is already used in the main clause in (20), see also (2) and (15), we may (correctly) expect it not to be used in the as-clause. After all, no aspectual contrast is implied. The use of leave simply paraphrases main clause get out and the event of the Germans' blowing bridges unfolded together with their leaving the city. On the other hand, the event of leaving is probably coded through a progressive form in (21) because the progressive form allows the leaving event to be stretched or slowed down so as to allow the seeing event to be contained in it.

Only future research across different modes and styles will be able to show whether the present analysis, which argues for a different use of the progressive form in simultaneity *as* and *while*-clauses, is indeed on the right track. To be sure, such research is not only important for theoretical linguistics (since it may reveal the flexibility of our construal operations) but also for EFL learners when faced with examples like (2) and (15).

#### References

Primary sources

BNCWeb: http://escorp.unizh.ch

Faber, Michael, 2003 [2002], *The Crimson Petal and the White*, Edinburgh, Canongate.

Heller, Zoë, 2003, Notes on a Scandal, London, Viking.

LDCE: Longman Dictionary of Contemporary English, 2003, CD version, Harlow, Longman.

Morrall, Clare, 2003, Astonishing Splashes of Colour, Birmingham, Tindal Street Press.

Ondaatje, Michael, 1993 [1992], The English Patient, London, Picador.

### Secondary sources

Biber, Douglas / Johansson, Stig / Leech, Geoffrey / Conrad, Susan / Finegan, Edward, 1999, Longman Grammar of Spoken and Written English, Harlow, Longman.

Broccias, Cristiano, 2006a, "The English Simultaneity Network: The Case of *as* and *while*-clauses". *LACUS Forum* XXXII: 33-41.

Broccias, Cristiano, 2006b, "The Construal of Simultaneity in English with Special Reference to *as-*clauses". *Annual Review of Cognitive Linguistics* 4: 97-133.

Broccias, Cristiano / Hollmann, Willem, forthcoming, "Do We Need Summary and Sequential Scanning in (Cognitive) Grammar?". *Cognitive Linguitics*.

- Declerck, Renaat, 1991, A Comprehensive Descriptive Grammar of English, Tokyo, Kaitakusha.
- Declerck, Renaat, 1997, When-Clauses and Temporal Structure, London, Routledge.
- Edgren, Eva, 1971, Temporal Clauses in English, Uppsala, Almqvist and Wiksell.
- Heinämäki, Orvokki, 1978, Semantics of English Temporal Connectives, Bloomington, Indiana University Linguistics Club.
- Langacker, Ronald, 1987, Foundations of Cognitive Grammar Theoretical Prerequisites (Vol. 1), Stanford, CA, Stanford University Press.
- Langacker, Ronald, 1991, Foundations of Cognitive Grammar Descriptive Application (Vol. 2), Stanford, CA, Stanford University Press.
- Morris, Lori, 1996, "Time and Cause in the English Connector *as*". *LACUS Forum* XXIII: 417-428.
- Murphy, Raymond, 2002, *English Grammar in Use*, Cambridge, Cambridge University Press.
- Schmiedtová, Barbara. 2004, At the Same Time... The Expression of Simultaneity in Learner Varieties, Berlin/New York, Mouton de Gruyter.
- Sinclair, John (ed.), 1992, Collins Cobuild English Usage, London, HarperCollins Publishers.
- Silva, Marilyn, 1991, "Simultaneity in Children's Narratives: The Case of when, while and as". Journal of Child Language 18: 641-662.
- Swan, Michael, 1995, Practical English Usage, Oxford, Oxford University Press.
- Thomson, Audrey J. / Martinet, Agnes W., 1986, *A Practical English Grammar*, Oxford, Oxford University Press.
- Williams, Christopher, 2002, Non-Progressive and Progressive Aspect in English, Fasano, Schena Editore.