

*TWICE AND CONSTITUENCY*<sup>1</sup>

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ABSTRACT

It is not the case that *two times* may always be substituted by *twice* (and *three times* by *thrice*). This may be done when *time* has a frequency or quantity sense, not when it refers to temporal location. And, although both frequency and quantity senses of *time* may be used in a comparative construction, the sequence *two plus times* is not always replaceable by *twice*. This is only possible when *two* and *times* belong to the same constituent.

1. Introduction

Dictionaries, be they twice as awful as many are, could scarcely improve (worsen) on the *OED*'s ingenuous comment in its entry for *twice*: "in all senses now the regular substitute for the phrase *two times*".

Consider the following:

- 1) The best two times to see kangaroos are dusk and dawn.
- 2) We saw kangaroos twice yesterday.

In (2) the *OED*'s precept does apply – one *could* say *two times* but it would sound awkward, *twice* being greatly preferred.<sup>2</sup> However, in (1) *two times* must remain and cannot be replaced by *twice*.

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<sup>1</sup> I have benefited from the most helpful comments on a draft of this paper from Alexandra Y. Aikhenvald, Laurie Bauer and Kate Burridge. Useful information comes from Quirk, Greenbaum, Leech and Svartvik (1985: 1139).

<sup>2</sup> Judgments in this paper are based on my and my senior colleagues' usage of British and Australian English. Younger speakers of Australian English, and speakers of varieties of American English, nowadays show a marked tendency to use *two times* rather than *twice*.

It is basically a matter of lexicon. The noun *time* in English has three distinct senses in which it can be modified by numbers.<sup>3</sup>

• *time*<sub>1</sub> refers to a *temporal location*, as in (1) and:

- 3) Even those four/two times I saw him up close I didn't realise he was blind.

We cannot here replace *two times* by *twice*.

• *time*<sub>2</sub> refers to *frequency* as in (2) and:

- 4) Even when I saw him up close four times/twice I didn't realise he was blind.

Here *twice* is preferred to *two times*.

• *time*<sub>3</sub> refers to *quantity*, as in:

- 5) Tom saw four times/twice the number of kangaroos that we saw.  
6) Mary earns four times/twice my salary.

The rule is straightforward:

- For a number *X* which is greater than three, *X times* is used whether the noun *time* refers to temporal location, as in (3), frequency, as in (4), or quantity, as in (5)-(6).
- The underlying collocation *two times* is generally replaced by *twice* when *time* refers to frequency or quantity, but seldom for *time*<sub>1</sub>, temporal location.<sup>4</sup>
- Relating to *three*, the archaic-sounding *thrice* can be used in the same circumstances as *twice* (for frequency and quantity, never for temporal location) although nowadays *three times* is generally preferred.

<sup>3</sup> Other senses of time include: (a) duration, as in *for a long time*; (b) a bounded period, as in *My time is limited*; and (c) specification, as in *It is now eight o'clock New York time*.

<sup>4</sup> Note that the *OED* gives an example from 1907 of *twice* replacing *two times*<sub>1</sub>: "T. Cobb in Story-Teller 93/1 *Judging by Lady Kitty's demeanour the last twice they had met.*" This would not be judged appropriate by many speakers of Standard English today, *two times* being required rather than *twice*. However, a search of the *Google* does turn up a few instances similar to this; for example *The twice I was wrong*. This would not be considered acceptable by the majority of speakers.

*Thrice* will not be mentioned again; it may be used wherever *twice* can be, in all examples below.

And, corresponding to the smallest number of all, *one*, there is *once*. This is used, like *twice* (and *thrice*), with *time*<sub>2</sub>, the frequency sense, as in:

- 7) We saw kangaroos once yesterday.

*One* cannot be used with the quantity sense, *time*<sub>3</sub>, so there is no *once* referring to quantity.

Corresponding to (5) one could only say something like *Tom saw the same number of kangaroos as we did*, and corresponding to (6), something like *Mary earns the same salary as me*.

Number *one* is seldom used with *time*<sub>1</sub>, referring to temporal location. One simply says *the time*, as in *The time to see kangaroos is at dusk*. It is possible to say *one time*<sub>1</sub>, by way of emphasising a unique occurrence; this is likely to be accompanied by emphatic *do*. For example: *The one time I did see him up close I didn't realise he was blind*.

*Once* has a range of other meanings, not paralleled by *twice*, which fall outside the purview of the present study.<sup>5</sup> For example, it can indicate 'at one time' or 'on one occasion' as in *I once saw Winston Churchill*. *Once* can be added to temporal linker *when* or conditional linker *if*, and the *when* or *if* may then be omitted from the combination, leaving *once* as a clause linker. For instance: *The judge will soon deliver his verdict (when) once he examines the evidence*. And so on.

We will now survey the three senses of *time* identified above. §2 describes the temporal location sense, for which it is seldom possible to substitute *twice* for *two times*. §§3-4 discuss the replacement of *two times* by *twice* in the frequency and quantity senses. §5 examines comparative constructions featuring these two senses of time – *twice* may be used in some but not in others. This relates to constituency within a construction type.

## 2. The temporal location sense: *Time*<sub>1</sub>

In the temporal location sense, the noun *time*<sub>1</sub> typically occurs as head of an NP (in a core argument slot), accompanied by an article or demonstrative. For example:

- 8) The (first/last/next) time(s) that I saw John, I noticed that he was sick.  
9) Those (other) times that we met, you seemed to ignore me.

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<sup>5</sup> See the survey in Payne, Huddleston and Pullum (2007).

A number could be inserted when *time*<sub>1</sub> occurs with the definite article or a demonstrative – *The first/last/next two times that I saw John ...* and either *Those two other times that we met ...* or *Those other two times that we met ...* (this could be used if we met in batches of two times, say at Christmas and New Year annually).

A limited set of modifiers may occur with *time*<sub>1</sub>. Besides *first*, *last*, *next* and *other*, illustrated in (8)-(9), there is *only*, as in:

- 10) The only two times I saw Mary she was laughing.

There may also be a superlative, as *The best two times ...* in (1).

We may also get *only* or *just* or *even* preceding the definite article or demonstrative as in (3) and:

- 11) Only the first two times are you allowed to enter without paying.  
12) Just those two times when the boss was out did we get to play with the computer.

The temporal location sense may also occur with the indefinite article, but there cannot then be a number modifier, for example, *A time I will never forget is when we climbed the mountain*. And *time*<sub>1</sub> may be modified by a number with no preceding article or demonstrative, as in:

- 13) Two times I particularly remember are when you broke your leg and fractured your arm.

In none of these sentences can *two times* be replaced by *twice*. However, if *two times* is preceded just by *the* (with no *first*, *last*, *next*, *other*, *only*, *just* or *even*) then some speakers can use *twice* as an alternative to *two times*. For example:

- 13) a. The two times/twice I particularly remember are when you broke your leg and fractured your arm.

### 3. The frequency sense: *Time*<sub>2</sub>

The phrase *X times*, where *X* is a number and *times* the frequency sense of the noun, can function as head of an NP which is in a core argument slot. *Two times*<sub>2</sub> is then replaced by *twice*, as in:

- 14) Four times/twice in a lifetime suffices for most people.

However, *X times*<sub>2</sub> most often functions as a sentential adverb. It can occur at any of the three positions in clause structure available to sentential adverbs (Dixon 2005: 386):

- *I*, as initial element in the clause;
- *F*, as final element in the clause;
- *A*, after the first word of the auxiliary.

These may be illustrated in:

- 15) *I* John has *A* criticised me *F*.

The single word adverb *twice* may with equal felicity be placed in any of the three slots. A two-word phrase, such as *four times*, is preferred in slots *I* and *F*. It could be used at *A*, but sounds a little awkward there.

There are instances of *X times* (referring to frequency) in more complex constructions, where *twice* may be used instead of *two times*. For example, *X times*<sub>2</sub> may be modified by a relative clause, or a prepositional phrase, or something like *altogether*. Consider:

- |     |                   |              |                  |
|-----|-------------------|--------------|------------------|
| 16) | He kicked the dog | (four times) | (that I noticed) |
|     |                   | (two times)  | (in the morning) |
|     |                   | (twice)      | (in succession)  |
|     |                   |              | (in all)         |
|     |                   |              | (altogether)     |

Or *X times*<sub>2</sub> can be preceded by *just* or *only*:

- |     |                   |         |              |
|-----|-------------------|---------|--------------|
| 17) | He kicked the dog | (just)  | (four times) |
|     |                   | (only)  | (two times)  |
|     |                   | (twice) |              |

We may also get:

- |     |           |              |            |
|-----|-----------|--------------|------------|
| 18) | He did it | (four times) | too often. |
|     |           | (two times)  |            |
|     |           | (twice)      |            |

*Twice* can be used in all of (16)-(18) since here *time* refers to frequency. But it is also possible to retain *two times*. Note that in each of these sentences the following or preceding elements modify the whole of the *X times* element. It may

be the complexity of the whole adverbial phrase which allows for the retention of *two times* here, as an alternative to *twice*.

There are frequency expressions involving *X times* with respect to a unit of time. For example:

- |     |                    |              |         |         |
|-----|--------------------|--------------|---------|---------|
| 19) | He waters the lawn | (four times) | (a)     | (day)   |
|     |                    | (twice)      | (every) | (week)  |
|     |                    |              | (each)  | (month) |

*Two times* would not be likely to be used in such a context, *twice* being preferred.

There is an alternative way of saying (19), with *twice* modifying an adverb derived from a period-of-time noun:

- 20) He waters the lawn twice daily/weekly/monthly.

One would not be likely to say *two times daily*. And in fact *four times daily* does not sound terribly felicitous. With a two-word frequency designation such as *four times*, one of the alternatives set out in (19) may well be preferred.

Frequency specifications may also be included as the first element of a compound, such as *four-times-married* or *twice-married* (not *\*two-times-married*).<sup>6</sup>

However, when *two* is not adjacent to the noun *times*, although it does modify it, there is no possibility of using *twice*. This is illustrated in:

- 21) He kicked the dog two separate times.

Both *two* and *separate* modify *times*, but rules of surface ordering require *two* to precede *separate*. Since *separate* intervenes between *two* and *times*<sub>2</sub>, these words may not be replaced by *twice*.

We can now consider the following, where *X times*<sub>2</sub> is linked either to *or more* or to *more*:

- |     |                    |   |
|-----|--------------------|---|
|     | (a)                | (b)   |
| 22) | four or more times | four times or more                                  |
|     | two or more times  | twice or more (scarcely <i>*two times or more</i> ) |
| 23) | four more times    | four times more                                     |
|     | two more times     | twice more (scarcely <i>*two times more</i> )       |

<sup>6</sup> Payne, Huddleston and Pullum (2007: 594-596) recognise three senses of *twice*: 'numerical' (my 'frequency'); 'multiplier' (my 'quantity') and what they call 'term of office', illustrated by *the twice President of the United States and the thrice Lord Mayor of London*.

In column (a), *or more* and *more* modify the number, *X*, whereas in (b) they modify *X times*. The interesting point is that, in (b), the final placement of *or more* and *more* allows *times* to immediately follow *two*, and *two times* is here replaced by *twice*.

It can be seen that, for the examples discussed thus far, every instance of the frequency sense of *time* modified by number *two* is replaceable by *twice* – optionally in (16)-(18) but pretty obligatorily elsewhere. That is, replacement occurs whenever no other word intervenes between *two* and *times*. We will see in §5 that things are a little different in comparative constructions.

#### 4. The quantity sense: *Time*<sub>3</sub>

Whereas the frequency sense of *time* most often occurs within an adverbial expression, the quantity sense generally occurs at the beginning of an NP which is in core argument function (or else makes up a whole NP). Examples include (5)-(6) and:

- 24) [Four times two] is eight.
- 25) [Twice two] is four.
- 26) [Five times/twice the number of troops which we presently have available] would not suffice for us to beat the enemy.
- 27) John is [four times/twice the size he ought to be]

In each of these, *twice* is used in place of *two times*. One would not expect to employ *two times* in (26) or (27). However, *two times* is equally good in (25) – *Two times two is four*. This is by analogy with other components in the arithmetic tables taught in schools (which are, after all, called “times tables”).

There is an alternative to *twice* in the quantity sense – *double* may be used rather than *two times* in each of (5)-(6) and (25)-(27), with essentially the same meaning. Similarly, *treble* can be used in place of *thrice* or *three times*, and *quadruple* in place of *four times*. Similar forms exist for higher numbers but, as the quantity increases, so the frequency of usage decreases – *quintuple*, *sextuple*, and so on. And note that *double* may not be used in place of *two times* or *twice* in any of the comparative constructions discussed at examples (b) and (c) in the next section.

#### 5. Comparative constructions

Both frequency and quantity senses of *time* may feature in comparative constructions. Beginning with quantity, we can contrast (repeating (5) as (28a)):

- 28) a. Tom saw four times/twice the number of kangaroos that we saw.  
 b. Tom saw four times/twice as many kangaroos as we saw.  
 c. Tom saw four/two times more kangaroos than we saw.
- 29) a. Mary earns four times/twice what I earn.  
 b. Mary earns four times/twice as much as I earn.  
 c. Mary earns four/two times more than I earn.

What we find here is that *twice* must be used in place of *two times* in the (a) sentences and also in the (b) sentences, involving *as many as* (for a countable noun such as *kangaroos*) or *as much as* (for a mass noun such as *money*). However, *twice* may not replace *two times* in the (c) sentences, involving *more than*.

Adjectives can also feature in comparative constructions involving the quantity sense of *time*. For example:

- 30) b. That car sells four times/twice as fast as this model.  
 c. That car sells four/two times faster than this model.
- 31) b. John is four times/twice as handsome as Tom.  
 c. John is four/two times more handsome than Tom.

Once more, *twice* must be used in the (b) constructions, involving *as ... as*, but cannot occur in the (c) sentences which feature the comparative form of an adjective, *faster* or *more handsome*. The (c) clauses cannot include *twice*, only *two times*. But they sound awkward with *two times*. Whereas for *three times* or *four times* (or some high number) either the (b) or the (c) construction may be used, in the case of *two times* there is a marked preference to employ construction (b), with *twice*.

The factors relating to whether or not *two times* must be replaced by *twice* relate to constituency within the copula complement. The syntactic structures of (31b) and (31c) are:

- 31) b'. John is [four times/twice] as handsome as Tom.  
 c'. John is four/two [times more handsome] than Tom.

In the (b) constructions *four/two* forms one constituent with *times*, and this permits *two times* to be replaced by *twice*. However, in (c) *more handsome* forms a constituent with *times* and the number modifies *times more handsome*. We see that *two* and *times*, although contiguous in surface structure, belong in different constituents. This blocks the replacement of *two times* by *twice*. The same argumentation applies for each of (28)-(30).

It also applies for comparisons involving the frequency sense of *time*. We can contrast:



- 32) b. John visits his mother [four times/twice] as often as Fred does.  
 c. John visits his mother four/two [times more often] than Fred does.

Once more, the fact that *times more often* forms one constituent in the (c) construction, with the number modifying this constituent, means that *two* and *times* belong to different constituents, and this blocks the replacement of *two times* by *twice* in (32c). Sentence (32c) with *two times* is acceptable but sounds very awkward. We get a similar situation to that described above for the quantity sense – whereas (32b) and (32c) are equally acceptable for *four times*, when the number of frequencies involved is two, the preferred alternative is (32b).

## 6. Conclusion

Some instances of *two times* may be replaced by *twice*, but for others this is scarcely possible. There are two factors determining this. First, the noun *time* should refer to frequency or quantity, not to temporal location. And secondly, *two* and *times* must belong to the same syntactic constituent for the sequence to be replaceable by *twice*.

## REFERENCES

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