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Abstract: In the present paper, we will explore how ‘upstairs’ integrated the language by first describing a constructionalization pattern, or matrix, that gave rise to many adverbs, prepositions and nouns. Based on corpus examples from the OE period to the present, the grammaticalization of ‘upstairs’ will be investigated and discussed. The paper will also discuss the formation of some other words semantically related to architecture. The results of the corpus analysis tend to demonstrate the essential role of semantic generalization via metaphorization for a noun to integrate the constructionalization matrix and hence to become grammaticalized.

Résumé : Ce travail décrit comment l’adverbe spatial « upstairs » a pu intégrer la langue anglaise par le moyen d’une matrice constructionnelle qui a donné naissance à de nombreux adverbes, prépositions ou noms. La prise en considération et l’analyse d’exemples provenant de plusieurs corpus du VA à l’anglais contemporain révèle le processus de grammaticalisation de « upstairs ». Le travail décrit également la formation d’autres termes en rapport sémantique avec l’architecture. Au bout de l’analyse des résultats du corpus, le rôle prépondérant de la généralisation sémantique et de la métaphorisation dans la réussite de la grammaticalisation par le biais de la matrice constructionnelle sera envisagé.

How did we get ‘upstairs’?

Constructionalization in adverb formation and other issues

It seemed fitting in a workshop called “Inhabiting language, Constructing language” to research an element in architecture and to see how it had integrated the grammar of the language. It also seemed appropriate to examine the process in the light of Construction Grammar theory. In the present paper, we will undertake two research questions. The first will outline a constructionalization pattern to account for the formation of many adverbial particles and prepositions in English taking the example of ‘upstairs’ as one of the more recent coinages. The second question comes as a result of this initial research project: why was the lexeme ‘stair’ recruited in this process as opposed to other lexemes? We will suggest some hypotheses to answer these questions¹.

From grammaticalization to constructionalization

In order to start the question of the origin of ‘upstairs’, we have to go back in time to look for the first occurrences of the item. The obvious place to start such a search is in the Oxford English Dictionary (OED). Under the entry we find a first occurrence in 1598 in the form of “vp staires” and the author is none other than the coiner of so many words in English, William Shakespeare himself. However, can we call two words, ‘up’ and ‘stairs’, a lexeme? We will see that the OED’s decision to give the collocation the title of “first occurrence” of ‘upstairs’ is not unjustified. But once you have the first written occurrence, a more fundamental question arises — how was Shakespeare able to coin this word and how was the word able to be understood by his contemporaries and better still, how was the word able to integrate the system of the language apparently so seamlessly? The answer cannot be found in any dictionary. It is to these questions that we turn.

The fields of linguistics that study how words appear in the language are etymology, the study of first occurrences and meanings, and grammaticalization, the study of how lexemes move from the more lexical grammatical categories towards the more functional grammatical categories. Grammaticalization became a field of study in its own right mainly with Hopper and Traugott (1993). Some examples of this shift from less grammatical to more grammatical

¹ The author would like to thank Daniel Huber (CLEE-ERSS) for his keen mind and eye while doing this research as well as two anonymous reviewers for their later comments and suggestions.

include the rise of English auxiliary verbs from lexical verbs, e.g. ‘will’ from the OE verb ‘willan’ meaning ‘wish’ or ‘want’, or the French future tense inflection that came from the Latin lexical verb ‘habere’ meaning ‘have’, which was added after the lexical verb to reinforce the notion of projection in the future which was insufficiently perceptible in the existing inflection (which originally derived from lexical ‘be’). The auxiliary verb of the future ‘habere’ eventually fused with the lexical verbs, reduced phonologically and became an inflection, the ultimate stage of grammaticalization before disappearance. These stages typically, but not necessarily, occur in grammaticalization: recruitment of a lexical item usually having a vague meaning; phonological reduction, loss of inflections, eventually morphological fusion with the lexeme; more phonological and morphological reduction; disappearance and replacement by a new auxiliary of grammaticalization. This life cycle is only theoretical and rarely completed in actual fact.

In the present case with ‘upstairs’, we have a more complex issue than just the change of grammatical status (and phonological form) of single items. Indeed, in today’s form and even more so in Shakespeare’s, there are visibly two lexemes that make up the compound. Both are easily analyzable, yet, together, they form a meaning that is more than just the addition of the individual meanings of the lexemes. The grammaticalization process of such items has been outlined in McMichael (2006). Here, I would like to go further to integrate some of the notions provided by Construction Grammar (Goldberg, 1995; Croft, 2001), and more recently the notion of constructionalization as described by Trousdale and Traugott (2013).

On the cline from less grammatical to more grammatical, adverbs come first followed by prepositions. Many items that semantically refer to space are grammatically either adverbs or prepositions with many being members of both categories depending on the context. Examples of such ‘adpreps’ (Bolinger, 1971) are ‘up’ or ‘down’. Both these items can serve to illustrate grammaticalization patterns.

‘Up’ can be traced back to a Proto Indo-European root ‘*upo’ with the reconstructed meaning of ‘under’, ‘up from under’ or ‘over’ (Watkins, 2000: 94). This root gave the OE ‘up, uppe’ (adv, prep or prefix) with its present meaning ‘up’. The original lexical category and meaning of the word are impossible to retrieve due to its long history in IE languages, and our limited records of these languages (only 5,000 years). However, as a prefix or a

preposition, ‘up’ has served as an element in forming other adverbs and prepositions. For instance, ‘above’ comes from OE ‘būfan’ (Gmc compound *bi-ufana* ‘by up/off’). Hence, ‘up’ and its relative, the adprep ‘off’, are members of the “grammaticalizing particles” (McMichael, 2006).

On the other hand, ‘down’ is the product of a newer process in grammaticalization which we will reconsider in the light of construction grammar (Traugott & Trousdale, 2013). This process is called “constructionalization” and furthers the insights of McMichael (2006) on grammaticalizing particles. ‘Down’ came from OE (c. 1100) ‘of dūne’, meaning literally ‘from the hill’. What we have here is a prepositional phrase (PP) structure, one of the oldest fixed syntactic patterns of IE languages (Hewson, 1992). It is a pattern (among others) behind the formation of many of the adpreps. It is also a construction in construction grammar terms. Constructions play the role of providing a model – a matrix – to allow other grammaticalizations. This process is called ‘constructionalization’.

In the present case, the prepositional phrase served as a model (p + NP). The PP gave the syntax of the constructionalization matrix for the formation of adpreps. It also contributed function (adverbial) and semantics (locative) to the constructionalization matrix. This matrix has some special features which mark it off from the PP proper. The most important feature is the lack of determination on N. In OE, determiners were rare and usually found only as marked forms for emphasis. In ME, determiners became necessary as the language moved from analytic to synthetic and case inflections were drastically reduced. The loss of determination on N was a significant step towards grammaticalization. McMichael (2006) adds that N also lost inflection. If this is often the case, it is by no means evidence of category change. As will be seen, the plural inflection had a role to play in the process. Later on in the process, there was morphological fusion of p with N and frequently phonological reduction.

As a constructionalization pattern, the matrix allowed the formation of ‘down’ in the following steps: ‘of thæra duna’ > ‘of dūne’ > ‘a-dūne’ > ‘adune’ > ‘doun’ > ‘down’, demonstrating the features of grammaticalization: loss of determination before the noun, affixation of the preposition and subsequent phonological reduction. There is also grammatical categorical change from prepositional phrase to adverb (c. 1100) to preposition (c. 1513). In the case of ‘down’, we can notice a further feature of grammaticalization: it can now serve as a grammaticalizing particle as in ‘downstream’ or ‘downstairs’.

The matrix became productive at the hinge of the Old English and Middle English periods as English was becoming a more synthetic language, and extremely productive throughout ME. Through host-class expansion (Himmelmann, 2004), the construction incorporated new constituents other than NPs by analogy². The Middle English period witnessed the creation of over 130 adpreps (Groussier, 1984). This can be compared to the 40 odd adpreps in OE and the 90 odd adpreps in PDE. Many of these creations did not survive³. In this paper, we shall focus on the p + N matrix.

In the case of ‘upstairs’⁴ we can see that as recently as 1598, constructionalization was still happening. Let us take some examples from the OED, the MED and other corpora in chronology to follow the process to full integration:

1. Sebastianus..astah þa up to þære stægre þe stod [...]. c1000 (Sebastian climbed then up to the stair (and) there stood)

adv-pt + p + NP (det N)

2. Ne trowe no mon wiþ ese steize to þe sterres; ne bugge wiþ delyces þin endeles bl[i]sse. 1349: (Richard Rolle of Hampole ... and his Followers, vol. II, part 1, *Yorkshire Writers*) (truly no man with ease climbs to the stairs nor bow with pleasure your endless bliss)

p + NP (det N + pl)

3. his industrie is vp staires and down staires. 1598: (Shakespeare *Henry IV*, Pt. 1 ii. v. 101)

up (p) + stair (N + pl.)

4. Up stairs we nimbly creep, And find the Sluts asleep. 1658: (E. Phillips *Myst. Love & Eloquence* 75)

up (p) + stairs (N + pl)

5. I think that after the women had gone upstairs the others turned their thoughts upon you again. 1876: (T. Hardy *Hand of Ethelberta* I. vii. 91)

² “A syntactic head that initially occurs with a specific type of complement may increase its range of possible complements to include more and more different syntactic categories”. For instance, ‘upwards’ (p + V), ‘along’ (p + Adj), etc. These will not be discussed here.

³ One such casualty was *upfloor*, grammatically a noun meaning ‘an upper floor or room’.

⁴ Incidentally, Shakespeare coined *downstairs* in the same sentence as *upstairs*.

upstairs => fused elements, adverb

The morphology of the construct has been revealed to allow us to conclude that Shakespeare's use is clearly grammaticalized due to the fact that there is no determiner before the noun 'stair'. A thorough search through the Innsbruck corpus of late Middle and early Modern English letters did not uncover any other examples of loss of determination before 'stair'. Yet the key period of grammaticalization was between 1386 and 1698, the period covered by the Innsbruck Corpus of English Letters.

Another contextual feature which enables grammaticalization is often called 'semantic bleaching' or desemanticization.

6. The Wiþtall foole no sooner incling had, Then up the Staires hee ran as hee were mad: 1640: (Brathwait, *ar't asleepe*, 86.) (no sooner had the resistant fool bowed, than up the stairs he ran as if he were mad)

In the present case, 'stair' became pluralized to 'stairs' and 'stairs' was used to refer to the flight of steps, rather than the singular form 'a stair'. The oldest attested uses of 'stair' (stægre) was as a singular referring to the flight.

7. He feoll of anre stægre, and forþy gelæg. c1000: (*Ælfric Lives Saints* (Skeat) xviii. 232.) (he fell off a stair and consequently lay)

As confirmed by Samuel Johnson:

8. Stair was anciently used for the whole order of steps; but stair now, if it be used at all, signifies, as in Milton, only one flight of steps. 1755: (Johnson *Dict. Eng. Lang.* (at cited word))

There are some cases where the plural was being used in ME to mean steps.

9. [They] brought her down the stayers of the paleys. 1490: (Caxton's *Blanchardyn & Eglantine* (1962) xlvi. 180.)

Collective plural forms of nouns are typically perceived to be less referring than singular forms. This may be a key to the success of 'stair' in the matrix. However, we cannot be sure of the completion of the grammaticalization process by the end of the 16th century. Shakespeare may be referring to either one flight of steps located in the inn where Henry V is talking with Edward Poins, or to several as a generality.

The success of ‘stairs’ in the matrix

After having looked at the formative process of the adprep via the p + N matrix construction, we will now turn to another aspect concerning more specifically the choice of the noun in the construction.

The etymology of ‘stair’ is revealing: the OE ‘stæger’ came from the Germanic ‘*staigrī,’ itself from the verb ‘*staig-’ : ‘*stīg-’ meaning ‘to climb’ (cf. German *steigen* and the now defunct verb in English ‘to sty’). In ME the noun was written variously ‘steire, steygere, steyr, steyer, stare, steer, staygher, stair’, among others⁵. In OE and ME, the noun ‘stair’ often followed the now obsolete verb ‘sty’ (meaning ‘climb’) as a sort of cognate object akin to “sing a song” or “think a thought”.

10. Sebastianus..astah þa up to þære stægre þe stod [...] c1000

11. steiȝe to þe sterres. 1349

More importantly, ‘stairs’ became a metonymy for parts of a house, the intimate place and private area, in ‘upstairs’. It also came to refer metaphorically to status.

12. Which..make my backe, a ladder for their feete, By slaundrous steppes and stayres of tickle talke, To clyme the throne, wherin my selfe should sitte. 1576: (G. Gascoigne *Steele Glas* 16.) (which makes my back a ladder for their feet, by slanderous steps and stairs of tickle (fickle? = deceitful) talk, to climb the throne in which I myself should be sitting)

Other architectural candidates for grammaticalization

Our second research question appeared at this point. Was ‘stairs’ the only successful part of buildings to be grammaticalized and what about other architectural features? What was the key to its success and subsequent metaphorical uses?

In the late Middle Ages, houses in towns began to have several stories and therefore stairs between them. The stairway was an important and central element in architecture, and also reflected on the status of the dweller. In the 17th century it denoted a certain wealth and social standing. It distinguished the town-dweller from a country-person. Social hierarchies became epitomized at that time. The rich and the not-so-rich bourgeois lived upstairs above their shop. The poor stayed on the ground or hidden. Servants were separated from their

⁵ Which can explain why doing a corpus search with a concordancer such as AntConc can be painstaking. It was often easier to find the collocation of ‘sty’ with ‘stair’.

masters on different floors. And this is when ‘upstairs’ became part of English. Yet there are several other architectural elements in houses that also appeared in the noun slot of the construction.

One was a ‘door’ which was indeed grammaticalized via the same constructional matrix in ‘indoors’ and ‘outdoors’:

13. One admires Musick and Paintings, Cabinet-Curiositys and in-door Ornaments. 1709: (Ld. Shaftesbury *Moralists* iii. iii. 240.)

Its meaning quickly became abstract and was used as a metonymy for ‘house’:

14. Love driveth feare out of doores. 1574: (St. Avstens *Manuell in Certaine Prayers S. Augustines Medit. sig. Qvijv.*)

Here, both love and fear are feelings and not things to be sent literally out of a house. Even more clearly do we have a metonymy in:

15. Many Sailors drink..wives and children out of doors. 1659: (D. Pell *Πελαγος* 437.)

In this last example, we have an excellent case of the caused-motion construction (Goldberg, 1995: 152 *et passim.*) in which the mono-transitive verb ‘drink’ has become a complex transitive verb requiring an oblique argument [out of doors]. The meaning of the sentence is that many sailors cause their wives and children to leave their home due to an excessive consumption of alcohol. As in ‘upstairs’, the noun ‘doors’ is plural denoting a collective and more abstract referent. Indeed, one would expect a single door to be sufficient to be a metonymy for a house. ‘Doors’ is clearly a metonymy of house as it can be replaced by the more frequent expression in contemporary English ‘house and home’ and the sentence keeps its sense. In ‘indoors’, we have a metonymy for the whole house, and not just the upper part as with ‘upstairs’.

A defunct relative of ‘upstairs’ was ‘upfloor’ (upflore/upfleringe = an upper floor or room). There were several occurrences in early ME, but the noun did not survive:

16. Se wytega..eode into his upflore & feoll þære on cneowen & gebæd hine to Gode. a1150(OE): (*Vsp.D.Hom.* (Vsp D.14) 38/10:) (The wiseman went into his upstairs room and fell there on his knees and prayed to god)

17. Cristes apostles weren wuniende..on ane upflore..on þisse deie þet is pentecostes..com ferliche muchel swei of heofne and fulde al þa upfleunge [OE upfleringe] mid fure.

a1225(OE): (*Lamb.Hom.Pentec.* (Lamb 487) 89:) (Christ's apostles were living in an upstairs room, on this day that is pentecost, they come sociably much sound of lamentation and filled all the upstairs room with fury)

In both examples, the word is a noun and is collocated with a verb meaning 'live'. 'Upfloor' clearly ante-dates 'upstairs' but is built on exactly the same model. This demonstrates once again the persistence of the constructionalization matrix from late OE to eModE.

There are other elements of architecture that were grammaticalized. For instance, 'house', 'town', 'side', and 'step' could be found at various periods. 'House' can be found in 'outhouse':

18. Þe screwe..het þis maide take & lede hire to an out hous [a1450 Bodl. an hous].
a1350 (►a1325): (*St. Cecilia* (Ashm.) 218 in *Yale Stud. in Eng.* (1898) 3 88 (MED)) (the penitence had this maiden taken and put herself to an outhouse)

In this case, the notion of "grammaticalization" is debatable⁶ as the output is grammatically a noun, then as it is today. This is akin to 'upfloor'.

'Town' appeared more recently in British English 'uptown',

19. Mama went uptown today. 1802: (J. Cowles *Diary* 8 Apr. (1931) 65)

and 'downtown' appeared later in American English.

20. To-day when I go down town I shall subscribe for the 'New York Observer' for you.
1835: (T. Gray *Lett.* (1893) 55)

'Outside' seems to derive from the body part⁷ 'side' but is quickly used in other ways.

21. From þe outside..of þe said gate ynward toward þe wherf. 1457: (*Plea & Mem. Rolls London Guildhall No. A81.8* (MED),) (from the outside of the said gate inward toward the wharf)

Lastly we have 'step'. In the OED, the definition of 'upstep' is: "A step used in making an ascent, used in *figurative* contexts."

⁶ The debate concerns the direction of change from less grammatical to more grammatical. Here, the reverse movement is happening and this is referred to as 'lexicalization'.

⁷ Other grammaticalized body parts used in architectural description include 'back', 'in front of', and 'behind'. (Heine, 1997)

22. Syððan þeo mynecene eallan þas eadmodnysse upstæpes [OE stæpas] ʒestihð, heo cymð sone to þare soðan Godes lufe, þe eʒe utan drifð. a1225: (*Wint.Ben.Rule* (Cld D.3) 41/25) (Afterwards the nun all so exulted upsteps climbs, she comes soon to the true God's love, the fear out drives).

It is the use of “figurative” in the definition of the entry which draws our attention. Shakespeare's use seems to be figurative as the larger context of “His industrie is vp staires and down staires” shows:

23. HENRY V. I am now of all humours that have showed themselves humours since the old days of goodman Adam to the pupil age of this present twelve o'clock at midnight.

[Re-enter FRANCIS] What's o'clock, Francis?

FRANCIS. Anon, anon, sir. [Exit]

HENRY V. That ever this fellow should have fewer words than a parrot, and yet the son of a woman! His industry is upstairs and downstairs; his eloquence the parcel of a reckoning.

[...]

The interpretation of this line can either be that Francis is literally working hard running up and down the stairs, or that his work is figuratively all over the place and therefore ineffectual.

There are older examples that show very clearly the metaphorical meaning of being up or down stairs, i.e. in a higher or a lower status:

24. [...] þese days, when very commonplace mediocre scholars often arrive at þe upper steps of þe prelatie stairs, a bishops name has weight wiþ fashionable ladies. 1230: (*Cockayne Þe Liflade of St. Juliana*)

25. Now hath he climbed the seconde steppe of this staire to the crowne. 1596: (W. Lambarde *Perambulation of Kent* (rev. ed.) 469)

Or in a bad state:

26. Than hardynes & fortune went downe the stayre. ?1504: (S. Hawes *Example of Vertu sig. ee.i*)

Part of the grammaticalization process, as we said, seems to go through a stage of generalization of the meaning, then on to abstract and metaphorical meanings⁸. In these and other examples, the desemanticization process is well under way.

Take for instance the first attested uses of ‘downwind’ in the OED. It is the figurative use that appears chronologically first:

27. †b. fig. Towards decay or ruin; into or (commonly) in a depressed or unfortunate condition, in evil plight; to go down the wind, to ‘go down’, decline. Obs.

28. When they saw him downe the wind and fortune to frowne upon him. 1600: (P. Holland tr. *Livy Rom. Hist.* xxxiv. 867)

29. I'de whistle her off, and let her downe the wind, To prey at fortune. a1616: (Shakespeare *Othello* (1622) iii. iii. 266)

Although *Othello* is referring to Desdemona meaning that he would allow her to leave him, the language is very metaphorical. This is nevertheless the first attested use of the non-figurative sense of down-wind in the OED: “a. In the direction in which the wind is blowing; along the course of the wind.”

The second instance in the dictionary entry is more literal.

30. For one that goes up the weather a number goe downe the winde. 1618: (N. Breton *Court & Country* A 4)

It would seem reasonable to say that Shakespeare played on both literal and metaphorical senses of the terms ‘down the wind’ in *Othello* as well as ‘upstairs’ and ‘downstairs’ in *Henry V*. The metaphorical senses were all available and in current use at that time.

Constructionalization and new items

Yet, is metaphorization a necessary ingredient of grammaticalization? There is a general consensus in the literature on grammaticalization that lexical items need to have a vague meaning or be polysemous in order for them to be candidates for a change of grammatical status⁹. The general drift of this investigation would tend to show that metaphorization rather

⁸ Wikipedia notes: "Stairway" is also a common metaphor for achievement or loss of a position in society; or as a metaphor of hierarchy (<https://en.wikipedia.org/wiki/Stairs> viewed 25 Aug 2016)

⁹ E.g. Hopper and Traugott, 1993: 96-7. However, metaphorical meaning is construed as a result of grammaticalization (p. 87).

than polysemy is a precondition. At least, in the sense of the noun generalizing its meaning (e.g. through pluralization and semantic bleaching) and being used in more figurative contexts long before grammaticalization is detectable.

However, for grammaticalization to actually take place, we argue that the item must be inside a matrix construction. This process may then be called constructionalization. The language builds upon older patterns in order to create new forms.

The matrix construction $p + N$ that has been under study here has several output categories. Mainly, adverbs are the result, but a few adjectives and nouns are also found demonstrating that grammaticalization is not necessarily unidirectional, or from less grammatical to more grammatical on the cline. However, all of the resulting items have a locative meaning showing the historical semantic and functional link between PPs and locative adverbials. One can also note that time adverbials are not absent: ‘tonight’, ‘today’ and ‘tomorrow’ (and the dialectal ‘to-year’) are all instances of the $p + N$ matrix at work.

Further research may be undertaken to try to ascertain how the constructionalization patterns can result in items in various grammatical categories, and thus go against the grain of unidirectionality. Whatever, it appears necessary to include constructional information in the study of grammaticalization in order to get a fuller picture.

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