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The Passive across Two Registers of Present-Day British English: A Corpus-Based Lexico-Grammatical Perspective

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This paper explores the use of the passive in present-day British English, focusing on its register-specific lexico-grammatical patterns. The interaction of the grammatical structure, lexis, phraseology and register is examined on the basis of two sub-corpora of the British National Corpus 2014 *– academic prose and informal conversation. The results have corroborated the findings of previous studies in that the pattern* 'BE / GET V-ed' *is populated by verbal participial forms which create a cline with de-participial adjectives. The communicative needs of registers have been shown to have a decisive impact on the frequency of passive patterns and the specific lexical choices associated with the patterns. In both registers, the* 'BE / GET V-ed' *patterns appear to constitute the core of larger fixed phraseological units, e.g.,* can't be bothered to/with, *or* it should be noted that.

Keywords
The passive; lexico-grammatical patterns; register; *British National Corpus 2014*; academic prose; informal conversation

1. Introduction

The present paper sets out to explore the English passive – a topic that "has pride of place in all reference grammars of English" (Gilquin and Granger 73) and has been dealt with within a variety of theoretical frameworks. Unlike the traditional descriptions, our approach focuses on the lexico-grammatical patterns associated with the passive. Since these lexical and phraseological choices are closely tied to the communicative purposes of particular registers (Biber), we compare the frequency and functions of passive patterns across

two registers – academic prose and informal conversation. The study draws on "a large collection of samples of contemporary British English language use, gathered from a range of real-life contexts"[1], the *British National Corpus 2014*. The corpus-based lexico-grammatical approach is hoped to shed some light on the "complex interaction of grammar, lexis, register, and phraseology in relation to frequency" (Hunston 204).

2. The passive, the register and the lexis-grammar interface

The descriptions of the passive in grammars have traditionally focused on its correspondence with the active, the structural differences between active and passive clauses, and the impact of the choice between the passive and active clause on the distribution of semantic roles and on information structure (e.g., Huddleston and Pullum 1427 ff; Quirk et al. 159 ff). Corpus-based studies have drawn attention to the associations between the passive as a grammatical structure and the specific verbs attached to it on the one hand (Gries and Stefanowitsch; Stefanowitsch and Gries), and to the impact of register on lexico-grammatical variation (Biber; Biber et al.), on the other. Drawing on this recent direction of research, Gilquin and Granger argue that

> "the passive is not a purely grammatical phenomenon. First, the distinction between the active and the passive is not a strict dichotomy but a gradient ranging from fully verbal to fully adjectival. Second, the passive displays lexical effects, with some verbs being more attracted to the passive voice than others and/or typically used in a limited set of phraseological units." (72)

Considering the first claim, Rowley-Jolivet (referring also to Banks 1993[2]) points out that

> "[the] boundary between adjectival and verbal passives has been the subject of much linguistic discussion, but with little consensus. […] the traditional distinction between the two is difficult to maintain, and […] an alternative analysis in terms of copula *BE* + Complement – meaning that all passive sentences basically express relational process – is an equally feasible explanation." (46)

At one pole of this passive – copular clause cline (Biber et al. 936), there is the "central passive" (Quirk et al. 167). Central passive clauses have a clear correspondence to their active counterparts both at the level of the verb phrase and at clause level. The passive verb phrase comprises the auxiliary verb *BE* or *GET* and the past participle of the particular lexical verb. The syntactic differences between the corresponding active and passive clauses involve a) the object of the active appearing as the subject of the passive, and b) the subject of the active clause forming the prepositional complement in the optional adverbial *by*-agent in the passive clause (cf. Huddleston and Pullum 1427–8). The active and passive clauses differ also in the assignment of semantic roles to the clause elements: in the active clause, the subject is generally aligned with the active role of the agent or source of the action (cf. Dušková et al. 253); in the passive clause, "the subject […] is associated with a passive role, the role of patient" (Huddleston and Pullum 1427).

Based on the form of the passive verb phrase, a distinction can be made between the unmarked *BE*-passives and the marked, less frequent *GET*-passives (Xiao et al. 112). Central *GET*-passives (e.g., *I was getting looked at…*) resemble *BE*-passives in that they "are propositionally equivalent to active clauses and that, from a purely structural point of view, they can be replaced by *BE*-passives" (Rühlemann 113). The *GET*-passive, however, "is by no means just a structural variant of the *BE*-passive but it carries […] the speaker's attitude towards the proposition" (Rühlemann 114); *GET* "occurs predominantly in passives representing situations that have an adverse or a beneficial effect on the subject referent, or on someone associated with it", where "the subject-referent is seen as having an agentive role in the situation, or at least as having some responsibility for it", e.g., *Kim got sacked* (Huddleston and Pullum 1442). The *GET*-passive also differs from the *BE*-passive in that it combines only with dynamic verbs; the *BE*-passive mostly "describes a state", whereas the get-passive "describes the process of getting into the state" (Biber et al. 481).

Passive clauses can also be classified according to whether they comprise the agent *by*-phrase (i.e., the long passive) or not (the short, agentless passive). Short passives are generally more frequent[3] than long passives (Xiao et al. 113) due to the main function of the passive, viz. expressing the verbal action without mentioning the agent of the action (Dušková et al. 259). Where the agent is expressed, it is "typically informationally dense and thus semantically indispensable" (Xiao et al. 113); from the point of view of information structure, the passive allows clause-final placement of rhematic elements (Dušková et al. 263).

The other pole of the passive – copular clause gradient is represented by clauses with copular verbs complemented by an adjective phrase headed by a de-participial adjective. In these clauses, the verb *BE* or *GET* can be substituted with copular verbs, such as *seem* or *become*; the clauses have no corresponding active structure, and do not take an agent *by*-phrase (Quirk et al. 167–171). The de-participial adjectives can be modified by *very* and *too* (if gradable), some of them can "form opposites by prefixation of *un-*" (e.g., *The letter was still unanswered.*), and they "always have a stative interpretation" (Huddleston and Pullum 1436-1441; cf. Granger 2013). While the two poles of the cline can be delimited using a number of criteria, generally, "[p]assive constructions form a fuzzy category" (Biber et al. 475), and stative passives, which "describe the state resulting from an action, rather than the action itself" (Biber et al. 936) are often considered borderline cases between the verbal and adjectival interpretation.

To return to the lexical effects connected with the passive (Gilquin and Granger), strong lexico-grammatical associations were shown to feature between certain verbs and the passive, e.g., *BE concerned*, *confined*, or *involved*, with some verbs occurring solely in the passive, e.g., *BE born*, *reputed*, or *drowned* (cf. Stefanowitsch and Gries; Biber et al. 479; Huddleston and Pullum 1435). At the same time, register was found to be "a fundamentally important factor for the description of lexico-grammatical associations" (Biber 31). The passive verbs *BE achieved*, *associated*, *defined*, *expressed*, *measured*, *obtained*, *performed*, or *related*, for instance, are common in academic prose, whereas *BE allowed*, *bothered*, *married*, or *stuck* are associated with conversation (Biber et al. 479). Moreover, the passive verbs tend to "have their own phraseologies. For example, they have their preferred collocates (e.g., *an action/a position/a step is taken*) and form (semi-)idiomatic expressions (e.g., *is taken into account/into consideration/for granted*)" (Gilquin and Granger 29). The "consistent and important differences in lexico-grammatical patterns across registers" (Biber 32) have a functional basis in that they are associated with "the communicative purposes and situational context of texts" (Biber and Conrad 2).

Drawing on these findings, the present paper sets out to explore the lexico-grammatical patterns associated with the two types of the passive and their functions in two registers of present-day British English which can be considered "two major poles" in the register continuum, i.e., informal conversation and academic written prose (Biber 9).

3. Data and method

The material was drawn from the *British National Corpus 2014*, a 100-million-word representative corpus of present-day British English. Two sub-corpora of the corpus were explored and compared – informal conversation (11 million words) and academic prose (20 million words). The former contains 1,251 transcribed recordings of 668 speakers in informal settings from the years 2012 to 2016 (Love et al.). The academic prose sub-corpus comprises academic texts from arts and humanities, medicine, natural science, politics, law and education, social science, technical and engineering domains, whose authors are associated with British Universities and which were published between 2010 and 2019 (Brezina et al.). The corpus was accessed via #LancsBox X (Brezina and Platt).

The approach to the study of lexico-grammatical patterning and phraseology adopted here can be described as the "grammar-to-lexis viewpoint", since it "takes grammatical categories as prior and notes the lexis that occurs disproportionately frequently in each category" (Hunston 202). Declarative and interrogative clauses with *BE*- and *GET*-passive predicates were identified using CQL queries in the KWIC tool;[4] further queries were then used to explore the colligations and collocations of the passive verbs. The analysis of the passive patterns relies on the whole sub-corpora; the classification of semantic domains (drawing on Biber et al. 360–371) is based on the 50 most frequent passive verbs in each sub-corpus (with *BE*- and *GET*-passives analysed separately).

4. The passive patterns in academic prose and informal conversation

4.1 Frequency

As shown in Table 1, there is a significant[5] difference between academic prose and informal conversation in the frequency of the passive, with the *BE*-passives overused in academic prose, and *GET*-passives in conversation.[6]

Table 1. Frequency (raw and relative) of passive patterns in academic prose and conversation

	BE-passive (total)	*BE*-passive (per million words)	*GET*-passive (total)	*GET*-passive (per million words)
academic prose	324,299	16,378.7	500	25.3
conversation	34,950	3,177.3	5,573	506.6

The frequency of the passive, however, constitutes merely a part of the picture. Since the words which populate a particular pattern are not a random collection but have been observed to share certain elements of meaning and/or functions (Hunston), the frequent lexical associations between the passive and particular verbs in each register (Tables 2, 3) are likely to reflect register-specific functions of the passive, accounting also for the differences in frequency of the passive patterns between the registers (Sections 4.2, 4.3).

In conversation, in particular, some of the passive verbs "could be alternatively analysed as the copula *be* followed by a predicative adjective" (Biber et al. 480). Similarly to Biber et al. (476), we adopted "a relatively broad definition of passive", excluding only forms which have no active counterpart. Therefore, following Biber et al. (477–480), such verbs as *BE bothered*, *married*, *stuck* (in conversation) and *BE based on, related to*, *associated with* (in academic prose) were included in the frequency counts. *GET rid*, on the other hand, was considered "a fixed phrase rather than a structural alternative to the *BE*-passive" (Rühlemann 115), and was excluded from the counts presented below.

Table 2. The most frequent passive verbs in conversation (pmw = per million words); the verbs are arranged by frequency in descending order

Conversation
***BE*-passive** (frequency 10 pmw at least)
call, *do*, *make*, *allow*, *born*, *mean*, *put*, *tell*, *take*, *use*, *bother*, *sit*, *give*, *go*, *leave*, *pay*, *finish*, *write*, *change*, *say*, *stick*, *build*, *worry*, *base*, *set*, *break*, *bring*, *move*, *lose*, *see*, *close*, *ask*, *get*, *find*, *invite*, *send*, *run*, *teach*
***GET*-passive** (frequency 1 pmw at least)

marry, *pay*, *do*, *tell*, *catch*, *involve*, *change*, *put*, *hit*, *dress*, *send*, *give*, *kill*, *kick*, *pick*, *take*, *bite*, *invite*, *start*, *knock*, *call*, *stop*, *throw*, *sort*, *mix*, *distract*, *arrest*, *eat*, *piss*, *make*, *pass*, *fine*, *charge*, *ask*, *move*, *beat*, *confuse*, *sack*, *tax*, *attack*, *teach*, *offer*, *leave*, *stress*, *use*, *stab*, *steal*, *addict*, *sting*, *run*, *lock*, *find*, *pull*, *fuck*, *suck*, *blow*, *push*, *turn*, *cancel*, *lose*, *lay*, *stick*, *drag*, *bully*, *buy*, *burn*, *wash*, *trap*, *book*, *vote*, *divorce*, *feed*, *fire*, *cover*

Table 3. The most frequent passive verbs in academic prose (pmw = per million words); the verbs are arranged by frequency in descending order

Academic prose	
***BE*-passive**	(frequency 10 pmw at least)
frequency 655–150 pmw	*use*, *find*, *show*, *see*, *consider*, *make*, *associate*, *observe*, *give*
frequency 149–100 pmw	*base*, *take*, *perform*, *require*, *identify*, *report*, *present*, *obtain*, *calculate*, *apply*, *define*, *conduct*, *expect*
frequency 99–50 pmw	*determine*, *measure*, *develop*, *carry*, *achieve*, *know*, *describe*, *include*, *need*, *do*, *assume*, *note*, *assess*, *provide*, *relate*, *reduce*, *discuss*, *compare*, *record*, *add*, *set*, *understand*, *analyse*, *collect*, *estimate*, *select*, *produce*, *ask*, *limit*, *design*
frequency 49–10 pmw	*link*, *propose*, *treat*, *think*, *employ*, *choose*, *place*, *suggest*, *investigate*, *locate*, *explain*, *remove*, *undertake*, *express*, *exclude*, *derive*, *attribute*, *establish*, *create*, *introduce*, *generate*, *test*, *say*, *detect*, *interpret*, *support*, *represent*, *construct*, *characterise*, *affect*, *examine*, *argue*, *call*, *implement*, *form*, *increase*, *prepare*, *draw*, *publish*, *view*, *study*, *evaluate*, *demonstrate*, *address*, *regard*, *influence*, *write*, *explore*, *adopt*, *follow*, *perceive*, *leave*, *build*, *hold*, *maintain*, *lose*, *classify*, *extract*, *model*, *drive*, *deem*, *divide*, *allow*, *replace*, *assign*, *confirm*, *refer*, *keep*, *bring*, *combine*, *intend*, *expose*, *recognise*, *recruit*, *control*, *cause*, *put*, *read*, *compute*, *characterize*, *repeat*, *complete*, *predict*, *acquire*, *dominate*, *reflect*, *illustrate*, *reach*, *highlight*, *summarise*, *capture*, *offer*, *connect*, *extend*, *incorporate*, *restrict*, *compose*, *separate*, *born*, *recommend*, *share*, *plot*, *accompany*, *deliver*, *tell*, *subject*, *meet*, *send*, *solve*, *believe*, *force*, *pay*, *run*, *raise*, *transfer*, *accept*, *improve*, *experience*, *embed*, *release*, *fix*, *correlate*, *transform*, *administer*, *recognize*, *encourage*, *convert*, *adapt*, *shape*, *distribute*, *invite*, *integrate*, *inform*, *list*, *translate*, *utilise*, *direct*, *engage*, *adjust*, *store*, *focus*, *modify*, *mediate*, *display*, *avoid*, *situate*, *mix*, *mark*, *mention*, *manage*, *mean*, *implicate*, *validate*, *recover*, *cover*, *retain*, *process*, *challenge*, *change*, *cut*, *reveal*, *acknowledge*, *fit*, *approve*, *quantify*, *enhance*, *frame*, *motivate*, *indicate*, *reject*, *monitor*, *structure*, *account*, *review*, *conclude*, *incubate*, *organise*, *constrain*, *involve*, *justify*, *wash*, *position*, *resolve*, *analyze*, *term*, *distinguish*, *target*, *prove*, *isolate*, *initiate*, *grant*, *feel*, *infer*, *purchase*, *deploy*, *sample*, *then use*, *conceive*, *specify*, *hear*, *summarize*, *attach*, *instruct*
***GET*-passive**	(frequency 1 pmw at least)
	marry, *involve*, *start*

4.2 Semantics

The differences in the distribution of the passive between academic prose and informal conversation are not only quantitative. As shown in Figure 1, there are marked differences in the representation of semantic classes of verbs across the registers, as well as between the two types of the passive. The classification is based on Biber et al.'s (360–371) classification of verbs into semantic domains. The 50 most frequent passive verbs in each register were classified into seven semantic domains – activity, communication, mental, existence and relationship, causative, simple occurrence, and aspectual verbs.[7] Activity verbs, such as *measure* or *kill*, "denote actions and events that could be associated with choice, and so take a subject with the semantic role of agent" in the active (ibid. 361); the actions can also be non-volitional. Communication verbs "involve communication activities" (ibid. 362), e.g., *tell*, *discuss*. Mental verbs, on the other hand, "do not involve physical action" (ibid.); they express cognitive or emotional meanings, e.g., *know*, *worry*, *see*. Verbs of existence or relationship "report a state that exists between entities" (ibid. 364), e.g., *relate*, *include*. Causative verbs are represented, for instance, by *allow* and *require*. Simple occurrence verbs, e.g., *be born*, *change*, "report [physical] events that occur apart from any volitional activity" (ibid. 364). The aspectual verbs *start* and *stop* "characterize the stage of progress of some other event or activity" (ibid.).

Our results largely correspond to Biber et al.'s (366) in that verbs pertaining to the activity domain form the dominant class both in conversation and in academic prose. This is true about conversation in particular, where activity verbs represent 56% of verbs in the *BE*-passive. Mental and communication verbs each constitute 16% of *BE*-passives in conversation; the representation of the other domains is marginal. This seems to "reflect the typical communicative purposes of that register: talking about what people have done (activity verbs), what they think or feel (mental verbs), or what they said (communication verbs)" (Biber et al. 371). In academic prose, mental verbs (30%) are represented to a larger extent than in conversation, followed by communication verbs (12%) and verbs of existence (12%).

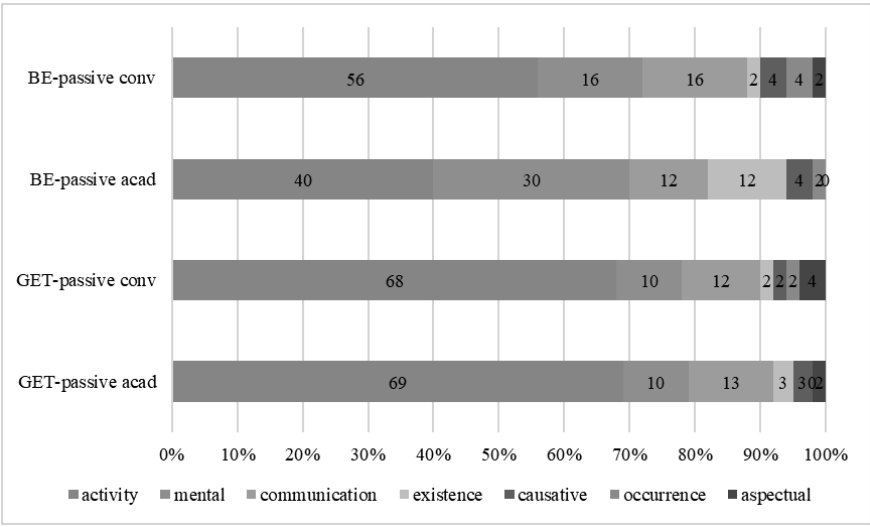

Figure 1. Semantic classes of verbs in *BE*- and *GET*-passives in conversation and in academic prose, based on a sample of the 50 most frequent passive verbs in each register (in the category *GET*-passive acad, the analysis is based on 67 verbs since there were 17 additional verbs with the same frequency as the 50th most frequent verb); the numbers inside the bars indicate the percentage of verbs in the domain

There is little overlap between the two registers with respect to the passive verbs which fall within the particular semantic classes. In both registers, the domain of activity verbs comprises common general activity verbs *do, make, take, give,* and *use*. Apart from these verbs, the activity verbs in academic prose refer mostly to "aspects of scientific methodology and analysis" (Biber et al. 480), e.g., *perform, obtain, apply, conduct, measure, reduce, analyse, select, produce*, and to the presentation of findings (*show*). In conversation, the passive verbs refer to everyday activities, e.g., *put, sit, pay, build, bring, close, kill, cook, sell*.

The mental verbs in conversation typically report private states of mind, the participles bordering on adjectives, e.g., *BE bothered, worried*, *arsed* (ex. 1). In academic prose, the subjects of mental passive verbs are inanimate; the passive clauses describe the methods of processing and interpreting the data and results of research, e.g., *BE identified, calculated, determined, expected,*

assessed, understood, estimated, compared (ex. 2). The only mental verb used in the *BE*-passive pattern in both registers is *know*, but it displays different patterning in each register. In conversation, it is most often followed by *as*, and the structure can serve an evidential function (ex. 3). In academic prose, the typical complement of *BE known* is the infinitive; the structure is used in literature surveys to report the findings of other researchers (ex. 4).

(1) so **you're worried** aren't you? (conv)
(2) Our findings **can be understood** as falling into the two components which combine (or collide) to create planning culture: the values of the 'development industry', and the values of local planning authorities. (acad)
(3) I mean he he**'s known as** a a ruthless bastard (conv)
(4) [...] palladium dicarbonyl species **are known to be** particularly unstable [75], akin to their Rh analogues which are only found in supported catalysts as isolated mononuclear moieties [76,77]. (acad)

In academic prose, passive verbs of communication (e.g., *BE reported, described, discussed*) serve as means of intra- or inter-textual reference; the high frequency of the passive verb-form *noted* is due to its use in the fixed idiomatic structure with extraposed subject *that*-clause '*it should be noted that*'. In conversation, verbs of communication, e.g., *BE written, said, asked, invited*, have specific, non-clausal subjects (ex. 5), and often report interpersonal communication.

(5) cos I've never known before I I**'ve been asked** about hard and soft water (conv)

Passive verbs of existence are frequent in academic prose only, often describing abstract relations, e.g., *BE related, included, based on*.

GET-passives differ from *BE*-passives in displaying very similar distribution of semantic classes in both registers, admitting predominantly activity verbs. The low frequency of the *GET*-passive in academic prose, however, renders the results unreliable. The lexical choices associated with *GET*-passives in conversation will be discussed in section 4.3.6.

4.3 Passive patterns

In this section, collocations and colligations (Table 4) of passive verbs will be

explored in order to identify the passive patterns associated with academic prose and conversation. *BE*-passives in both registers will be described first through their right and left collocates. *GET*-passives will be discussed afterwards, focusing on informal conversation.

Table 4. Colligations of the *BE*-passives (the three most frequent word-classes immediately following the passive verb)

academic prose			conversation		
	frequency			frequency	
	total	per million words		total	per million words
preposition	172153	8694.9	preposition	8372	761.1
to-infinitive	31614	1596.7	adverbial particle	2934	266.7
adverb	10047	509.2	*to*-infinitive	2358	214.4

4.3.1 '*BE* V-*ed* preposition'

'*BE* V-*ed* preposition'[8] is the most frequent pattern in both registers (Table 5).

Table 5. The pattern '*BE* V-*ed* preposition' – the most frequent prepositions

	% of *BE*-passives	most frequent prepositions
academic prose	54.6%	*in, by, to, with, for, as, from, on, at, into, through, of, within, between, during*
conversation	26.1%	*in, to, by, on, for, with, into, at, like, about, from, as, of, out*

4.3.1.1 '*BE* V-*ed in*'

Although the patterns with prepositions may look similar across the registers, the lexical verbs associated with a particular pattern are vastly different in academic prose and in conversation.

The differences highlight the functions the passive patterns perform in each register. This can be illustrated using the pattern '*BE* V-*ed in*'.

In informal conversation, the most frequent realisation of the pattern is the fixed phrase '*was/were born in*'. The second most frequent verb in this

pattern – *put* – collocates strongly with *prison* (with an animate subject, ex. 6). The preposition *in* also occurs frequently in '*BE done in*', and '*BE sat in*' where the verb *do* serves as a general verbal proform (ex. 7), and *sit* often refers generally to localisation (similarly to '*BE based in*') rather than sitting (ex. 8). The relatively high frequency of these patterns can be attributed to the underspecification typical of informal conversation.

(6) At the time people **were put in prison** for having that opinion and treated very very badly (conv)
(7) yes Paris **can be done in** a day but it costs a lot of money (conv)
(8) and you**'re sat in** this big room by yourself and there's one person in there (conv)

In academic prose, the pattern '*BE* V-*ed in*' often serves for inter- or intra-textual reference (e.g., '*BE shown / presented / reported / given / described in the literature / in Fig. 1 / in Section 3*)' (ex. 9) or as an impersonal means of presenting and interpreting the results of research, e.g., '*BE found / seen / observed in*' (examples 10, 11).

(9) The average times **are shown in** Table 6 in milliseconds. (acad)
(10) The same structured causal relationship **was found in** both samples, between people's attitudes towards the natural environment, conservation and tourism in a national park context. (acad)
(11) This **can be observed in** the wider range of correlation values for higher values of (Fig. 5a), as well as in the negative correlation between r and (Fig. 5b) and the positive correlation between r and observed when r is between 0.2 and 0.4 (Fig. 5c). (acad)

4.3.1.2 *'BE* V-*ed by'*

The preposition *by* follows the past participle in 9.2% of *BE*-passives in academic prose (1 505.9 occurrences per million words), and in 2.7% of *BE*-passives in conversation (83.3 per million words). The differences between the registers involve not only the frequency but also the type of complement of the preposition. In conversation, the pattern typically represents the long passive, which allows the post-verbal position of an animate agent (ex. 12). In academic prose, the complement of the preposition is often an inanimate or de-verbal noun or gerund, representing either the causer of the event in the long passive (ex. 13) or the instrument in the passive with an unexpressed agent

(ex. 14). In contrast to highlighting the animate agent in ex. (12), in academic prose the pattern contributes to the "agenthood" being "conventionally minimized" (Wanner 155).

(12) three months later I read an article some woman **was eaten by a salt water crocodile** on the exact beach we were just swimming on (conv)
(13) Bottom-up processing refers to stimulus-driven processing of physical properties, whereas top-down processing **is driven by goals and intentions**. (acad)
(14) Dynamic tracking **was achieved by the application of magnetometer motion sensing** to motion-capture a silkworm over the course of a 3-day cocoon construction period, during which the silkworm **was tracked by attaching a miniature magnet to its head**. (acad)

4.3.1.3 *'BE* V-*ed to'*

The *to*-prepositional phrase was found to complement verbs in the passive in both registers. While there is a partial overlap in the range of verbs the pattern admits in each register, in academic prose, verbs of existence and relationship are the dominant semantic class, represented by, e.g., *related, attributed, linked, added, referred, limited, reduced, compared, exposed, subjected, assigned, connected*. In conversation, apart from the verbs referring to relationships, often bordering on adjectives (e.g., *related, connected, compared, attached*) the pattern also comprises activity verbs (e.g., *give, attach, move, take*). In '*BE addicted to*', a pattern frequent in conversation, the *–ed* form displays more adjectival than verbal features (*addicted* can complement copular verbs, and can be intensified, ex. 15).

(15) you**'re so addicted to** looking at it instantly [...] you wouldn't be able to (conv)

4.3.1.4 *'BE* V-*ed with'*

In academic prose, the fourth most frequent preposition is *with*. The lower relative frequency of the preposition in conversation seems to be related to the different functions the pattern performs in the two registers. In written academic texts, the high frequency of the preposition is due to '*BE associated with*', where *associated* can be considered a de-participial adjective (OED). Other passive verbs frequently complemented by a *with*-prepositional phrase describe relationships (*BE compared / combined / correlated / linked with*); with

others the prepositional phrase refers to the instrument (*BE treated / performed / used / conducted / made / observed / provided / achieved with*, ex. 16) or object of study (*BE dealt with*).

In conversation, on the other hand, the prepositional phrase performs a broader range of functions, being most often a component of fixed phrases (*BE done / bothered / left / arsed / finished with*, ex. 17), but expressing also the instrument (*BE made / filled / stuffed / bombarded with*) and various other semantic roles (*BE born / stuck / impressed / diagnosed / sat with*), including the relationship patterns found also in academic prose (*BE associated / connected with*).

(16) Mice **were treated with** 111In albumin nanoparticles and 111In albumin (180-260g per mouse, n=3-4 per time point, 0.2-0.5MBq) via o.a. administration. (acad)
(17) I don't know I thought I **would be done with** this fairly quickly but it's taken longer than I thought (conv)

4.3.2 '*BE* V-*ed to* V-infinitive'

While the verbs which populate the pattern again differ across the registers, the differences in the functions of the passive pattern with the infinitive appear to be reflected clearly also in the choice of the subject of the passive. In conversation, the subject is most frequently realised by the personal pronoun (in 54.5% of the '*BE* V-*ed to* V-infinitive' pattern, most frequently *you*, *I*). The verbs include mental verbs (*mean, tempt, prepare, expect, determine, want, bother, arse*), causative verbs (*allow, force, entitle, train, encourage, oblige,* ex. 18, and communication verbs (*tell, ask*). The verbs *bother* and *arse* form fixed patterns with a modal verb and typically 1st person singular subject '*can't be bothered/ arsed*' (i.e., 'be disinclined or unwilling to make an effort to do or engage in something' (OED), ex. 19).

(18) we**'re allowed to** do that yeah? (conv)
(19) I **can't be bothered to** go to the jobcentre (conv)

In academic prose, the subjects are typically abstract nouns, e.g., *an alternative approach*, *an increase in ROS*, *the G2 composite method*, or inanimate nouns, e.g., *microparticles, ethanol*. The verbs include activity verbs (*use, design, make, employ*), mental verbs (*find, show, expect, consider, assume, think, know, see, intend,*

ex. 20), causative verbs (*require, need, allow*), and communication verbs (*ask, say, report*). Again, the passive pattern serves as an "agent-demoting construction" (Wanner 113) in academic prose, leaving the agent implicit both when scientific activities are reported, and when the interpretation of findings is presented.

(20) The analogous ethanol reaction Et1 **was found to** have slightly higher barrier 12.5-16.7kJ/mol, but having a lower reaction enthalpy. (acad)

4.3.3 '*BE* V-*ed* adverbial particle', '*BE* V-*ed* adverb'

Apart from prepositions and the infinitival particle *to*, the passive is often followed by an adverbial particle in conversation, highlighting another common feature of informal spoken English, namely the use of phrasal verbs (e.g., *BE brought / set / made / picked / given up*, *BE taken / pissed / cut off*, *BE put down /on / off / up*, *BE taken over*, *BE kicked out*, ex. 21). The adverbial particle attested most frequently in the passive pattern – *up* – can also convey aspectual modification, e.g., *BE cut / eaten / used up*, or intensification *BE fucked up*[9]*, screwed up*).

(21) it **was put up** on the university websites (conv)

In academic prose, a prominent immediate right colligation of the *BE*-passive is the adverb. The most frequent combinations of the passive verb and adverb include *BE taken seriously, BE found online, BE considered statistically, BE reported previously, BE noted however, BE used extensively.* No clear pattern, however, could be identified; examples (22) and (23) illustrate two uses of the adverbs, namely an adjunct, and a fixed expression used for extra-textual reference.

(22) A growing number of bioethicists have argued that not only humans, but also some other animals have interests, and that these interests **must be taken seriously** (Singer 1990; DeGrazia 1996; Cochrane 2012). (acad)
(23) Supplementary material related to this article **can be found online** at doi: […] (acad)

4.3.4 Left collocates of '*BE* V-*ed*'

4.3.4.1 The passive verb phrase

As suggested above, the different uses of the passive patterns are also revealed

by the left collocates of the *BE*-passive. In academic prose, the passive verb phrase comprises modal verbs more often (in 17.5% of *BE*-passives, examples 24 and 25) than in conversation, where they typically constitute parts of fixed phrases, such as *can't be bothered* (ex. 19 above).

(24) Two contrasting predictions **can be made** regarding the penetrability of mental imagery to top-down information in ASD. (acad)
(25) This biographical gap not only raises the possibility that the antiquity **might have been looted**, but that they **may have been altered** or indeed manufactured in very recent history with the intention of misleading the market about the true value and age of the object. (acad)

The present and past perfect forms of the passive constitute a similar proportion of the *BE*-passives in both registers (7.7% of *BE*-passives in academic prose, 7.8% in conversation).

4.3.4.2 The subject of the passive

Generally, the passive tends to combine with subjects expressed by noun phrases in academic prose, while a typical subject in conversation will be a personal pronoun (55% of *BE*-passives in conversation, and 6.9% in academic prose are realised by personal pronouns). The only personal pronoun relatively frequent in academic prose is the pronoun *it* (4.3% of *BE*-passives in academic prose), which in most cases serves as the anticipatory *it* subject with a *that*-clause or infinitival clause in extraposition. In these patterns, the passive serves as an impersonal reporting strategy with the verbs *note*, *argue*, *show*, *find*, *suggest*, *see*, *assume*, *observe*, *expect*, *conclude*, *report*, *know*, *estimate*, *propose*, *believe*, *hypothesize*, *acknowledge*, *recommend*, *think*, *recognize*, *anticipate*, *hope + that* (ex. 26); and *decide*, *relate*, *find*, *show*, *apply*, *intend*, *consider*, *expect*, *recommend + to* V-infinitive (ex. 27). Alternatively, the infinitival clause can function as the adverbial of purpose with the subject *it* being anaphoric (ex. 28).

(26) **It could be argued that** the coping resources young people utilise to counter lower levels of risk may fail once a threshold is reached, and they are unable to overcome the negative influences in their lives, leading to behaviour difficulties. (acad)
(27) For this reason, **it was decided to** implement 256 kbps MP3s. **It was found that** anecdotally, playing back multitrack MP3s was sonically

more gratifying than applying the data compression to a single more complex mix, and the subjective quality was deemed acceptable for purpose. (acad)

(28) One remarkable characteristic of the router is that **it is used to perform** both inter- and intra-chip communications. (acad)

It is also frequently used as the subject of the passive in conversation. Its reference, however, is anaphoric in most cases. The most frequent pattern comprises the verb *call*. As illustrated by example (29), '*it BE called*' is often used to ask or talk about the names or terms that the speaker does not know or has forgotten, which may account for the high frequency of the pattern.

(29) like the one of the like cigarette thing **whatever it's called** wow I can't believe I forgot the name for that thing (conv)

4.3.5 GET-passives

The most frequent representative of the '*GET* V-*ed*' pattern in both registers, *GET rid of*, was removed from the frequency list of *GET*-passives since it does not admit any correspondence with an active pattern (see section 4.1 above). Numerous other V-*ed* forms in the same pattern proved difficult to classify either as a de-participial adjective (complementing a copular verb) or a past participle forming a part of the passive structure. With stative verbs, the "structure forms a cline with the copular verb + participial adjective clause pattern" (Biber et al. 936). Some of the word-forms frequently used in the pattern '*GET* V-*ed*', e.g., *married, bored, involved, dressed, distracted, pissed, confused, addicted, stressed* are listed in dictionaries (OED) as adjectives, they can be premodified with intensifiers, coordinated with adjectives (often de-participial), and function as complements of copular verbs. On the other hand, some of them can be used as transitive verbs in the active voice, which supports treating the '*GET* V-*ed*' structure as a passive rather than a copular one.

Example (30 a) can illustrate the ambiguous status of the '*GET* V-*ed*' pattern in informal conversation: *flashed* is classified only as a verb-form in the dictionary (OED), *lost, frustrated* and *pissed off* as adjectives; in the *British National Corpus 2014*, *flashed* and *lost* are assigned the past participle tag, while *frustrated* and *pissed* are tagged as adjectives. In examples (30 b, c) the adjectival reading of *pissed off* is supported by the intensifier *totally* and its function of a

complement of the copula *feel*, respectively. The sentence in ex. (30 d), on the other hand, can be seen as an active counterpart of *I got really* […] *pissed off* in ex. (30 a), supporting the verbal (passive) reading of '*GET pissed off*'.

(30) a. so I dunno I **did get flashed** when I was driving here I **got really lost and frustrated and pissed off** er taking the wrong road in Germany (conv)
b. like if if my job was like knitting things all day I would I'm sure **I would get totally pissed off with it** like (conv)
c. I'd **feel pissed off** (conv)
d. I I saw this article **it really really pissed me off** (conv)

As noted by McCarthy, who analysed a small random sample of the *get*-passives in the *Spoken BNC2014*,

> "the preferred environment of the *get*-passive correlates strongly with undesired events. There are positive events recorded in a few cases; we can explain this by the shared context of 'newsworthiness', in the full knowledge that bad news is always more exciting and newsworthy than good."[10] (96)

Frequent examples of *GET*-passives conveying "negative or undesirable events" (ibid.) in conversation include *GET caught / hit / killed / kicked / bitten / knocked / arrested / eaten / charged / sacked / run over / struck / attacked / told off*. They are all dynamic passives. The negative impact on the subject referent becomes particularly prominent in long *GET*-passives (5.8% of *GET*-passives, ex. 31) with animate agents. Even seemingly neutral verbs, such as *GET changed* or *GET sent* tend to occur in negative surroundings in the *GET*-passive pattern (ex. 32), but they were also attested in neutral contexts. Verbs referring to events with a positive impact are few, e.g., *GET paid, offered, promoted*.

(31) I almost **got bitten by** a crocodile once (conv)
(32) but we **got sent** to a ghastly boarding school I can't tell you how awful (conv)

In academic prose, *GET*-passives are rare, the most frequent forms being close to the adjectival end of the passive-adjective cline, viz. *GET married, involved* (ex. 33), or forming fixed idiomatic phrases, such as *GET started*. The

association with the negative impact seems weaker in academic prose than in conversation, due to such verbs as *GET paid, counted, acquainted, noticed, released, promoted, published*. The frequencies, however, are too low to allow any general conclusions. Most of the *GET*-passives occurred in the social sciences, humanities, and politics/law/education sub-genres of academic prose.

(33) Where residents might be prepared to **get involved**, they may lack the time or initiative to do so. (acad)

5. Conclusions

Our results have corroborated the findings of previous studies (e.g., Biber et al.; Gilquin and Granger), namely that the pattern '*BE / GET* V-*ed*' is populated by *–ed* forms whose assignment to the class of participles or adjectives is a matter of degree rather than a dichotomy between two completely opposite structures. At the same time, however, the lexico-grammatical viewpoint adopted in the present study made it possible to shift the focus from the syntactic indeterminacy of the pattern to its lexical associations, colligations and collocations, and to highlight the different functions of the passive in academic prose and in conversation (mainly the minimisation of 'agenthood' vs. the focus on the interests, thoughts and actions of the direct interlocutors, respectively). The communicative needs of the register have been shown to have a decisive impact on the frequency of passive patterns (cf. the higher frequency and broader range of verbs in the *BE*-passive in academic prose and the *GET*-passive in conversation, and more specifically, e.g., the higher frequency of the '*BE* V-*ed* V-infinitive' pattern in academic prose, and the passive phrasal verbs in informal conversation). They also affect the specific lexical choices associated with the patterns (see also Ježková). A pattern may attract different passive verbs in academic prose and in conversation, depending on its register-specific functions – compare, for instance, the '*BE* V-*ed in*' pattern with such instantiations as *BE shown / presented / reported / given / described in the literature / in Fig. 1 / in Section 3* used for inter- or intra-textual reference in academic prose, and the same pattern realised by *BE born / sat / put / covered / done / stuck in*, referring to temporal and physical locations in conversation. In both registers, the pattern '*BE / GET* V-*ed*' was shown to constitute the core of larger fixed phraseological units, e.g., *can't be bothered to/with*, or *it should be noted that*.

Drawing on the largest balanced corpus of present-day British English available today, the study gives a frequency-based overview of passive lexico-grammatical patterns and functional associations between these patterns and register-specific communicative demands and situational factors. In our opinion, it would be interesting to complement the top-down approach by a more detailed text-linguistic (corpus-assisted) point of view, focusing on the impact of register. The *British National Corpus 2014* would also make it possible to study the inclination of particular verbs to occur in the passive rather than in the active in different registers. To conclude, we hope that the study has highlighted the potential of employing the corpus-based lexico-grammatical approach to explore the interaction of grammatical structure, lexis and register.

Endnotes

1. http://corpora.lancs.ac.uk/bnc2014/ Accessed 13 March 2023.
2. Banks, David. *Writ in Water. Aspects of the Scientific Journal Article.* E.R.L.A. Université de Bretagne Occidentale. 1993.
3. In this context, it is interesting to note Brůhová and Tyčová's finding that the agent was expressed in 19% of *GET*-passives in their data.
4. The queries comprised up to two optional adverbs and/or negators between the verb *BE* or *GET* and the past participle in the query, i.e. e.g., for *BE*-passives in academic prose: ([hw="be"][pos="R.*|XX"]{0,2}[pos="V.N"]) within <text genre="academic prose"/> Due to the large numbers of results, it was not possible to check all the concordance lines manually. The ratio of false positives (e.g., *well they're aged…* (conv), *these were partnered schools…* (acad)), estimated on the basis of 100-line random samples for each register and each type of passive, was between 2 and 3 per cent.
5. The difference is statistically significant on the 0.05 level of significance (Log-likelihood statistical test). Significance was calculated using the Calc tool (Cvrček).
6. A comparison with the relative frequencies of the *BE* and *GET* passives in academic prose in the 1990s (15,386 and 25 per million words, respectively), as reported in Leech et al. on the basis of the F-LOB corpus, suggests that there has not been a marked change in their representation. The different composition of the corpora, however, has to be taken into account.
7. An altenative approach to the semantic classification of passive constructions based on Vendler's Aktionsart typology was employed by Schwarz, demonstrating that "the GET-passive is behaving more like the BE-passive, which may be a sign that the construction is undergoing further grammaticalization" ("Grammaticalization" 325).
8. In the patterns, the components in italics are word-forms (e.g., *was*), and italic capitals indicate lemmata (e.g., *BE*). The abbreviation V-*ed* stands for the past participle of a lexical verb.
9. *Fucked up* displays both verbal and adjectival features in having an active counterpart (*and like I didn't do that well in art overall in er A Level anyway cos* ***I fucked up my exam***

(conv)) but at the same time admitting intensification and coordination with adjectives, e.g., *I know he is funny but like even when he's not like **totally fucked up and** like **paralytic** in the corner and really embarrassing* (conv)

10. These findings are in line with Schwarz's observation that in present-day American soap operas the adversative uses of *GET*-passives are more frequent than the positive ones, but "it would certainly not be possible to state that the *GET*-passive is currently any more adversative than the BE-passive" ("Soap Opera" 166).

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