

‘Psych-passives + *at* or *by*’ in Dickens’ English: in the case of psych-verbs synonymous to *surprise*

Taketazu, Susumu

1. Introduction

Emotions are inherent and intrinsic in humans. A variety of grammatical ways exist to express emotions in the human language. It is interesting to note that the English language utilizes the passive form of psychological verbs as a means to convey emotions and feelings. Let us introduce a sentence from the volume of *Kiritsubo in the Tale of Genji* (tr. by Arthur Waley).

(1)

The fortune-teller **was astonished by** the boy’s lineaments and expressed his surprise by continually nodding his head. (*The Tale of Genji, Kiritsubo*: 6) [Emphasis with Gothic font added throughout]

The English translation is made by using the passive form, while the original Japanese sentence is expressed with the intransitive verb.¹⁾

Psychological verbs (psych-verbs) in the past-participle form are named psychological passives (psych-passives) in this article. They show interesting behaviors in their occurrence with agentive prepo-

¹⁾ “Sounin odorokite, amatatabi katabuki ayashibu.” In this sentence, “odorokite” (*be astonished*) is an intransitive verb.

sitions. There have been arguments as to whether they are passives, semi-passives or adjectival constructions depending on which preposition they occur with (Close, 1975: §11.3; Quirk et al. 1985: §3.76, § 9.63; Palmer, 1988: §5.2.2; etc.). Close argues that the past participle form of a psych-verb *surprise*, for instance, is adjectival when it has a stative meaning and occurs with *at*, and it is a passive if it is dynamic in meaning and takes *by*, as the examples in (2) show.

(2)

(a) I am surprised at you. (adjective)

(b) I was surprised by the knock at the door. (passive)

Traditionally psych-passives have been said to occur with a preposition other than *by* in spite of their passive structure, as in (3).

(3)

Upon the whole, I **am** much **pleased with** him. (J. Austen, *Pride and Prejudice*, 1813); I see you **are surprised at** finding me here. (Goldsmith, *The Vicar of Wakefield*, 1766); She did not find many people who **were frightened of** her. (Woolf, *The Voyage Out*, 1915)

For a couple of centuries, however, the occurrences of *by* with psych-passives have been observed as in (4).

(4)

Athelstan could see Cranston **was not pleased by** the news. (Harding, *The Nightingale Gallery*, 1993); as I motored on in the sunshine towards the Berkshire border, I continued to **be surprised by** the famili-

arity of the country around me. (Kazuo Ishiguro, *The Remains of the Day*, 1989); Evelyn **was frightened by** the strength of her reactions. (Scobie, *A Twist of Fate*, 1990)

In my previous articles,²⁾ which examined the passives of *surprise* and the agentive prepositions they occur with,³⁾ I noticed that Dickens, one of the greatest writers in the history of English literature, used *by*-phrase with the passives of *surprise* quite frequently. In fact, *by* is used so frequently as to stir my curiosity and make me decide to examine Dickens' usage of the passives of *surprise* occurring with *at* or *by* in his novels.

Some interesting findings were made about the occurrences of the two prepositions.⁴⁾ First of all, *at* and *by* are used almost in equal numbers: *at* 40 times and *by* 39 times in his some twenty novels and books. This is quite anomalous from the norm of the day considering the ratio of *at* and *by* in Late Modern English (LModE), which is approximately 1 : 0.3.⁵⁾ Moreover, in his earlier novels, *at* was prevalent but gradually it lost its turf and *by* began to gain more ground and after *David Copperfield*, the novel in the middle of his writing career, *by* became so predominant that it gives us an impression that *by* was replacing or had nearly replaced *at*.

In this article we will examine Dickens' use of the passives of synonymous psych-verbs, and the agentive prepositions they occur

²⁾ Taketazu, 1999a and 1999b.

³⁾ The reason that I focused on studying the verb *surprise* is because *surprise* is one of the most typical psych-verbs. It is my belief that to examine the behaviors of such a typical psych-verb will help to reveal the behaviors of psych-verbs in general.

⁴⁾ Taketazu, 2002 and its revised version of 2008.

⁵⁾ This ratio is calculated from the data presented in my 1999a article (pp. 199, 207–208).

with, utilizing computer corpora. The synonymous verbs to be treated are: *alarm*, *amaze*, *appall*, *astonish*, *astound*, *baffle*, *bewilder*, *dismay*, *perplex*, *shock*, *startle* and *stun*.

We will see how Dickens uses psych-passives with *at* or *by* in his works. We will also see if Dickens' use is similar to or different from those of his contemporary writers of Late Modern English (LModE) and Present-day English (PE). Theoretical implications of psych-passives as to its status whether passives or adjectives are also considered.

2. Synonymous verbs

First, let us show how synonymous these verbs are by consulting *Oxford Advanced Learner's Dictionary* and providing the definitions of the verbs in the dictionary.

Amaze is described as "surprise (someone) greatly; fill with astonishment", *astonish* as "surprise or impress (someone) greatly", *astound* as "shock or greatly surprise", *baffle* as "totally bewilder or perplex", *bewilder* as "cause (someone) to become perplexed and confused", *perplex* as "make (someone) feel completely baffled", *shock* as "cause (someone) to feel surprised and upset", *startle* as "cause to feel sudden shock or alarm", *stun* as "astonish or shock so that they are temporarily unable to react", *surprise* as "cause (someone) to feel mild astonishment or shock". *Alarm* is described as "to make (someone) feel frightened, disturbed, or in danger" but a synonym dictionary lists "startle" and "dismay" for its synonym.⁶⁾

⁶⁾ *The Penguin Dictionary of English Synonyms and Antonyms* (1992).

It seems obvious that the definitions cited here are made by borrowing other synonymous word(s) and in that sense these definitions may be more or less circuitous. This kind of circular and roundabout definitions may be tantamount to saying that these verbs are used synonymously.

The fact that these verbs are synonymous may also be illustrated by the coordinated use of the two predicates by Dickens as shown in (5).

(5)

Mr. Pickwick felt, with some astonishment, that Sam's fingers were trembling at the gaiters, as if he were rather **surprised** or **startled**.(PP, ch.44); the two poor strangers, **stunned** and **bewildered** by the hurry they beheld . . . (OCS, ch.44); "I am **astonished** – I am **amazed** – at her audacity . . ." (BR, ch.80); John Willet was so **amazed** by the exasperation and boldness of his hopeful son, that he sat as one **bewildered**, (BR, ch.3); etc.⁷⁾

It shows that they are so synonymous that they tend to co-occur with each other. The abbreviated forms are used for the titles (*DC* for *David Copperfield*, for instance)⁸⁾ and the chapter it occurs in is

⁷⁾ More examples are found: 'bewildered and amazed' (PP, ch.16), 'surprised and astonished' (NN, ch.37), 'startled and bewildered' (OCS, ch.15), 'astounded and bewildered' (BR, ch.65), 'stunned and shocked' (BR, ch.68), 'startled, or shocked' (DS, ch.1), 'dismayed and shocked' (DS, ch.8), 'astonished and dismayed' (DS, ch.46), 'perplexed and dismayed' (GE, ch.41); 'startled or surprised' (GE, ch.11); etc.

⁸⁾ The abbreviated forms and the years of publication are as follows: *Sketches by Boz* (SB, 1835–36), *Pickwick Papers* (PP, 1836–37), *Oliver Twist* (OT, 1837–38), *Nicholas Nickleby* (NN, 1838–39), *The Old Curiosity Shop* (OCS, 1840), *Barnaby Rudge* (BR, 1841), *Martin Chuzzlewit* (MC, 1843–44), *Dombey and Son* (DS, 1846–48), *David Copperfield* (DC, 1849–50), *Bleak House* (BH, 1852–53), *Hard Times* (HT, 1854), *Little Dorrit* (LD, 1855–57), *A Tale of Two Cities* (TTC, 1859), *The Uncommercial Traveller* (UT, 1860), *Great Expectations* (GE, 1861), *Our Mutual Friend* (OMF, 1864–65). They are in chronological order.

shown in the parentheses after each example.

Synonymous as they may be, these verbs are likely to have some slightly different shades of meaning from each other, as in (6).

(6)

(a) He **was astonished**, but by no means **dismayed**. (*PP*, ch.2)

(b) Arthur **was more shocked** than **surprised** to hear it. (*LD*, ch.70)

Dickens, with these differences of meaning in mind, must have used the verbs in an appropriate way in a suitable context, but basically they seem to possess such identical or similar meanings as to be included in a group of synonyms.

3. Data collection

3.1 Corpus

The computer corpora of the Modern English Collection⁹⁾ and CLiC¹⁰⁾ were utilized together with The Victorian Literary Studies Archive¹¹⁾ for collecting data of Dickens. The Modern English Collection (MEC) is a corpus created at the University of Virginia and it is assumed to contain 50 million words of British and American English from the 16th to the early 20th century, including Dickens.

CLiC is a corpus created at the University of Nottingham and it contains 18 novels of Dickens, some of which are not contained in MEC. MEC, on the other hand, contains Dickens' works which are

⁹⁾ <http://etext.virginia.edu/etcbin/ot2www-pubeng?specfile=/texts/english/modeng/publicsearch/modengpub.o2w>

¹⁰⁾ <http://clic.nottingham.ac.uk:8080/index.html>

¹¹⁾ <http://victorian.lang.nagoya~u.ac.jp/concordance.html>

not included in CLiC, so these two corpora can be used to complement each other.

The Victorian Literary Studies Archive is a corpus produced by Professor Mitsuharu Matsuoka of Nagoya University. It contains more than a hundred British writers during the Victorian period and the concordance of Dickens includes 24 works of the novelist: novels, short story collections and non-fictions.

3.2 Some collected examples

The collected samples include complete sentences (*I am astonished at you!*) as well as non-finite clauses such as participle constructions (*So immensely astounded by the entrance*), elliptical sentences (*as if astonished at his presumption*) or object complements (*finding himself stunned by the words*). The sentences in which such linking verbs as *become*, *seem*, *look*, or *sound* function as main verbs (*never seemed dismayed by anything her mother said or did*) are also considered. Inappropriate examples are sieved and discarded and only apt ones are gathered and analyzed.

Let us present some examples gathered from the corpus in (7) below. The figures in the parentheses after each verb are the frequencies of occurrence of *at* and *by*.

(7)

(a) alarmed (at 17 , by 28)

“Oh, don't tell me you are going to send me away, sir, pray!” exclaimed Oliver, **alarmed at** the serious tone of the old gentleman's commencement! (*OT*, ch.14); He entreated him not to be **alarmed at** what he was about to say. (*NN*, ch.29); Quite **alarmed at** being the only recipient of

this untimely visit . . . (*DC*, ch.32); etc.

Oliver, who watched the old lady anxiously, observed that she was **alarmed by** these appearances. (*OT*, ch.33); Paul was quite **alarmed by** Mr Feeder's yawning. (*DS*, ch.12); Mr. Chillip was so **alarmed by** her abruptness. (*DC*, ch.1); "Do not be **alarmed by** what I say, Agnes," (*DC*, ch.19); etc.

(b) amazed (at 14, by 15)

Nicholas looked on, quite **amazed at** the introduction of this new theme. (*NN*, ch.37); But Withers, meeting him on the stairs, stood **amazed at** the beauty of his teeth . . . (*DS*, ch.37); Miss Abbey was **amazed at** her demeanour. (*OMF*, ch.6); etc.

John Willet was so **amazed by** the exasperation and boldness of his hopeful son, (*BR*, ch.3); I sat all the while, **amazed by** Mr. Micawber's disclosure, and wondering what it meant; (*DC*, ch.36); etc.

(c) appalled (at 0, by 5)

Master Charles Bates, **appalled by** Sikes's crime, fell into a train of reflection . . . (*OT*, ch.53); he began to be **appalled by** the prospect before him. (*HT*, ch.20); etc.

(d) astonished (at 24, by 13)

Mr. Winkle was so very much **astonished at** the extraordinary behaviour of the medical gentleman, (*PP*, ch.38); "How dare you, Dolly? I'm **astonished at** you." (*BR*, ch.27) "Oh! I am not at all **astonished at** your speaking thus openly . . ." (*MC*, ch.17); "I'm **astonished at** that, Master Copperfield . . ." (*DC*, ch.42); etc.

"Sir!" said the spinster aunt, rather **astonished by** the unexpected apparition and somewhat doubtful of Mr. Jingle's sanity. (*PP*, ch.8); "Is the gentleman at home?" said Kit, rather **astonished by** this uncommon reception. (*OCS*, ch.56); etc.

(e) astounded (at 1, by 7)

The linen-drapers of Hammersmith were **astounded at** the sudden demand . . . (*SB*, ch.10)

Oliver was rather **astounded by** this intelligence, (*OT*, ch.2); But, **astounded** as he was **by** the apparition of the dwarf among the Little Bethelites, (*OCS*, ch.41); So immensely **astounded** was Mr. Merdle **by** the entrance of Bar . . . (*LD*, ch.48); etc.

(f) baffled (at 0, by 5)

The little man seemed rather **baffled by** these several repulses, (*PP*, ch.10); Dennis, who was very much **baffled by** the cool matter-of-course manner of this reply, recovered his self-possession . . . (*BR*, ch.53); etc.

(g) bewildered (at 0, by 16)

Richard Swiveller, who being **bewildered by** the rapidity with which his cards were told, (*OCS*, ch.23); . . . confused by the deafening thunder, and **bewildered by** the glare of the forked lightning, (*OCS*, ch.29); The single gentleman, rather **bewildered by** finding himself . . . (*OCS*, ch.47); UNCERTAIN where to go next, and **bewildered by** the crowd of people who were already astir, (*BR*, ch.48); etc.

(h) dismayed (at 0, by 8)

Mr. Pinch was not so **dismayed by** this terrible threat, (*MC*, ch.7); Edith . . . never seemed **dismayed by** anything her mother said or did. (*DS*, ch.40); Here Mr. George is much **dismayed by** the graces and accomplishments . . . (*BH*, ch.63); etc.

(i) perplexed (at 0, by 12)

Very much **perplexed by** this summary disposition of his person, Mr. Pickwick walked back into the prison, (*PP*, ch.42); Captain Cuttle, **perplexed by** no such meditations, (*DS*, ch.49); If Little Dorritt were be-

yond measure **perplexed by** this curious conduct of . . . (*LD*, ch.24); etc.

(j) shocked (at 6, by 10)

“He’s **shocked at** the way your father goes on in,” (*PP*, ch.27); John, who was greatly **shocked at** this breach of decorum, (*BR*, ch.10); “I am **shocked at** the sight of you.” (*TTC*, ch.39); etc.

She would have been greatly **shocked by** the indelicacy of a young female’s going away with a stranger by night . . . (*BR*, ch.70); I was **shocked by** the mere thought of her having lived, (*DC*, ch.52); She was so very earnest and injured, that Mr. Gradgrind, **shocked by** the possibility . . . (*HT*, ch.33); etc.

(k) startled (at 0, by 40)

he was considerably **startled by** this tragical termination of the narrative. (*PP*, ch.44); when Mrs. Mann . . . was unexpectedly **startled by** the apparition of Mr. Bumble . . . (*OT*, ch.2); he was **startled by** the mention of his sister’s name. (*NN*, ch.32); The solitary passenger was **startled by** the chairmen’s cry of “By your leave there!” (*BR*, ch.16); At first I was **startled by** so abrupt a departure, (*DC*, ch.15); etc.

(l) stunned (at 0, by 17)

Solomon Gills was at first **stunned** by the communication, which fell upon the little back-parlour like a thunderbolt, (*DS*, ch.17); Oliver felt **stunned** and stupefied **by** the unexpected intelligence; (*OT*, ch.34); I was not **stunned by** the praise which sounded in my ears, (*DC*, ch.48); etc.

3.3 Statistical results

From the data we obtain the results on the following table. Verbs are horizontally arranged and each work of Dickens is vertically listed with the year of publication. The frequencies of occurrence of

Table 1 Frequency of occurrence of *at* and *by* with psych-passives in Dickens

Dickens Works	Verb Year	Prep	alarmed		amazed		appalled		astonished		astounded		baffled		bewildered		dismayed		perplexed		shocked		startled		stunned		Total		
			at	by	at	by	at	by	at	by	at	by	at	by	at	by	at	by	at	by	at	by	at	by	at	by	at	by	
Sketches by Boz	1835-36		2	2	0	0	0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7	4
Pickwick Papers	1836-37		4	0	0	0	0	2	2	0	0	0	0	1	0	1	0	0	0	2	1	0	0	5	0	0	7	11	
Oliver Twist	1837-38		3	1	0	1	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	3	0	1	3	10	
Nicholas Nickleby	1838-39		3	2	1	1	0	1	4	1	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	1	8	13	
Old Curiosity Shop	1840		0	3	2	0	0	0	0	1	0	1	0	0	0	5	0	0	0	0	1	0	0	1	0	2	2	13	
Barnaby Rudge	1841		1	3	1	1	0	0	3	1	0	0	0	1	0	2	0	0	0	0	0	2	1	0	4	0	7	14	
American Notes	1842		0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3	
Martin Chuzzlewit	1843-44		1	0	0	4	0	0	1	3	0	1	0	0	0	0	0	1	0	0	0	0	2	0	4	0	2	17	
Dombey and Son	1846-48		0	2	3	0	0	0	1	0	0	0	0	1	0	3	0	2	0	2	0	1	0	2	0	4	3	17	
David Copperfield	1849-50		1	3	2	1	0	0	1	0	0	0	0	0	0	1	0	2	0	0	0	1	2	0	3	0	1	5	13
Black House	1852-53		0	2	1	1	0	0	3	1	0	0	0	1	0	0	0	1	0	2	0	1	0	2	0	1	4	12	
Hard Times	1854		0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	6	
Little Dorrit	1855-57		0	1	1	2	0	0	3	0	0	1	0	0	0	1	0	0	0	3	1	1	0	2	0	1	5	12	
Tale of Two Cities	1859		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	
Uncommercial Traveller	1860		0	2	0	3	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	0	0	2	0	1	1	12	
Great Expectations	1861		0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	6	
Our Mutual Friend	1864-65		2	4	1	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	2	0	1	3	12	
Total			17	28	14	15	0	5	24	12	1	7	0	5	0	16	0	8	0	12	6	10	0	40	0	17	62	176	

at and *by* are shown under each verb. The total numbers from each verb and from each work are shown at the bottom and at the right of the table, respectively.

3.4 The role of statistics in philology

Before we get into the analysis of the data, some comments must be made on the role that statistics play in philology. Statistics cannot be expected to make an exact representation of a linguistic phenomenon and it does not have to be so in philology since philology is not so rigorous a discipline as scientific disciplines. In philology, statistics can be utilized to show a general tendency of a certain linguistic phenomenon. All this study aims to show is the approximate ratio of *at* and *by* and the statistics we obtained, even if they may be simplistic, will be of assistance in understanding a general tendency of the occurrence rate of *at* and *by*.

The figures of occurrence of *at* and *by* from each item, that is, each verb or each book, may not be big enough to make a meaningful observation. The solution to this drawback would be to add up the figures from each verb or each book. The simple addition of the figures, however, may not constitute a true representation; nevertheless, we get a general picture at the very least.

Furthermore, there is a possibility that one added-up figure may be so large as to affect the whole statistical data. It is not likely, however, that this is the case because one larger figure seems to be counterbalanced by another larger figure or ironed out by a number of smaller figures.

The picture we get from the analysis of the data may be likened to a huge jigsaw puzzle in which some pieces are lacking here and

there but we can still see the whole picture and find out the general pattern. And that should suffice for the purpose of this article.

4. Analysis

4.1 Classification of the verbs

Each verb seems to have its own characteristics in spite of their synonymity although there is an assumption that synonymous words tend to behave in a similar way syntactically. *Astonish*, for instance, tends to occur preferably with *at*, while verbs like *bewilder*, *startle* or *stun* only occur with *by*. Allowing for their individuality, it seems possible to classify the verbs into four groups as follows, depending on which preposition they chiefly occur with:

Group 1: *Amaze* shows almost an equal number of occurrences of *at* and *by*.

Group 2: *Astonish* tends to occur more with *at*, with fewer occurrences with *by*.

Group 3: *Alarm*,¹²⁾ *astound* and *shock* occur with both *at* and *by*, with more occurrences with *by*.

Group 4: *Appall*, *baffle*, *bewilder*, *dismay*, *perplex*, *startle* and *stun* only occur with *by* and never occur with *at*.

Verbs of Groups 1, 2 and 3 occur with both *at* and *by*. There are

¹²⁾ *Alarm* seems to show a similar behavior to *surprise*, in that there seems to have occurred a replacement of *at* by *by*. The verb tends to occur with *at* in earlier works and then shows a gradual decrease and a final near-disappearance. *By*, on the other hand, increases gradually and in later works it looks as if it replaced *at*.

cases where a verb takes both *at* and *by* in the same novel. Does Dickens try to make a distinction by using a different preposition or does the novelist choose a preposition in a haphazard way? We are not certain if there is any intention on Dickens' part but it seems likely that there are some rules involved in the choice of the preposition. This is an interesting theme but we will not get into this here. We will confine our analysis to the quantitative one in this article.

4.2 The dominance of *by*

The following results are obtained from the statistics. It shows that *at* and *by* occur at the ratio of 1 : 2.8, which means that *by* occurs nearly three times more frequently than *at*.

Table 2 Total occurrences of *at* and *by* and their ratio in Dickens

Prep	<i>at</i>	<i>by</i>
Frequency	62	176
Ratio	1	2.8

Dickens obviously prefers to use *by* as an agentive preposition with psych-passives. Does this conform to the norm of his day? Or is it different from the uses of his contemporary writers?

5. The comparison with Late Modern English

5.1 Data collection

MEC was used to collect data to make a comparison of Dickens with the writers of Late Modern English. Twenty writers each from Britain and America are selected for the examination. Some are lit-

erally famous and renowned authors and others are popular and widely-read writers of arguably secondary importance.¹³

Britain and America are treated separately because there may be some differences in the English between the two countries since American English has been said to preserve older features of English – described by Markwardt (1958: 59–80) as the “colonial lag”. Nevalainen (2006: 146) seems to be in agreement with this idea, saying that “this conservatism is called colonial lag”. So it may be expected that American writers show older tendency in their choice of preposition, but it has turned out that the results from the two countries are basically very similar.

The data of some 20 writers from each country may not represent the whole picture of the linguistic situation of the period but they are assumed to be a close representation since the results of Britain and America have proved to be quite similar to each other.

Taking the same procedures that we took in collecting Dickens' data, the following statistics are obtained.¹⁴

¹³ Writers of Britain are: Henry Fielding (1707–54), Samuel Johnson (1709–84), Oliver Goldsmith (1728–74), Walter Scott (1771–1832), Jane Austen (1775–1817), Charles Darwin (1809–82), Elizabeth Gaskell (1810–65), Charlotte Brontë (1816–55), Emily Brontë (1818–48), George Eliot (1819–80), Wilkie Collins (1824–89), Lewis Carroll (1832–98), Thomas Hardy (1840–1928), Andrew Lang (1844–1912), Robert Louis Stevenson (1850–94), Joseph Conrad (1857–1924) and Arthur Conan Doyle (1859–1930).

American writers are Washington Irving (1783–1859), James Fenimore Cooper (1789–1851), Catharine Sedgwick (1789–1867), Maria Lydia Child (1802–80), Ralph Waldo Emerson (1803–82), Nathaniel Hawthorne (1804–64), Robert Montgomery Bird (1806–54), Henry Wadsworth Longfellow (1807–82), Edgar Allan Poe (1809–49), Harriet Beecher Stowe (1811–96), Henry David Thoreau (1817–62), Herman Melville (1819–91), George William Curtis (1824–92), Maria S. Cummins (1827–66), Luisa May Alcott (1832–88), Alger Horatio (1832–99) and Mark Twain (1835–1910).

¹⁴ All the figures may not be necessarily exact because there are ambiguous examples (incomplete sentences or sentences with a pseudo-psychological sense) and there may be some oversights in dealing with a large amount of data. This will be the case with the figures on Table 5, where the division (by 4.5) may naturally lead to approximate numbers. Nevertheless, it does not seem to affect the general ratio between *at* and *by*.

Table 3 Frequency of occurrences of *at* and *by* in LModE

LModE Verb \ Prep	Britain		America		Total	
	at	by	at	by	at	by
alarmed	27	36	53	42	80	78
amazed	54	7	36	6	90	13
appalled	11	11	13	7	24	18
astonished	85	8	103	6	188	14
astounded	7	3	6	13	13	16
baffled	0	9	1	15	1	24
bewildered	1	18	1	36	2	54
dismayed	6	3	8	5	14	8
perplexed	0	8	1	26	1	34
shocked	41	30	43	18	84	48
startled	16	69	34	111	50	180
stunned	0	21	1	8	1	29
Total	248	223	300	293	548	516

5.2 Some distinctive characteristics of the verbs

The statistics show general similarities to and partial differences from Dickens' use. Let us point out some differences.

Verbs *amaze* and *astonish* occur predominantly with *at*, with a very few occurrences of *by*. The occurrence of *by* is only a fraction of that of *at*, compared to the higher profile that *by*-phrase is keeping in Dickens' English.

Verbs *alarm*, *astound* and *shock* occur more frequently with *at*, showing the opposite tendency to Dickens' use, although there are some regional fluctuations: *alarm* occurs more with *by* in Britain and *astound* with *by* in America.

Verbs *baffle*, *bewilder*, *dismay*, *perplex*, *startle* and *stun* have no occurrences with *at* in Dickens, whereas *at* is seen to occur in some

of his contemporaries even if its role is very minor. Let us present some examples in (8).

(8)

I was weakly **dismayed at** the ignorance, the poverty, the coarseness of all I heard and saw round me. (Brontë, *Jane Eyre*, ch.11); Evidently bewildered as to the cause of this summons, he looked up **perplexed at** Jadwin as he came up, out of his dim, red-lidded eyes. (Norris, *The Pit: A Story of Chicago*, ch.9); But now Celia was really **startled at** the suspicion which had darted into her mind. (Eliot, *Middlemarch*, ch.5); etc.

Dickens could have chosen *at*, just as some other writers did in his day, but he did not choose to do so. It seems obvious that Dickens has a preference to use *by* much more than the norm of his day.

5.3 The statistical comparison

The following table shows the total occurrences of *at* and *by* and their ratios in Late Modern English.

Table 4 Total occurrences of *at* and *by* and their ratios in LModE

LModE	Britain		America		Total	
	at	by	at	by	at	by
Frequency	248	223	300	293	548	516
Ratio	1	0.9	1	0.98	1	0.9

The ratios of *at* and *by* between the two countries are very similar: the ratio of Britain is 1 : 0.9, whereas that of America is 1 : 0.98. This similarity may suggest that the data is a good reflection of the linguistic situations of the day.

From the table it is evident that Dickens' contemporaries seem to have been much more conservative in their use of *by*, as compared to Dickens, who shows much higher frequency of *by*.

6. The comparison with Present-day English

We already note that Dickens' ratio of *at* and *by* with the passive of *surprise* is very much similar to that of Present-day English. How about the ratio of the two prepositions with other psych-passives? Let us compare Dickens with Present-day English.

6.1 Corpus and data

To compare Dickens' English with Present-day English, the computer corpora of BNC and COCA were used to collect data. BNC is a corpus of Present-day British English mainly from 1970 to 1995 and it contains 100 million words. Written texts consist of 90% of the corpus and spoken texts 10%.¹⁵⁾ COCA is a corpus of current American English from 1990 to 2012, with 450 million words.¹⁶⁾ The texts are fictions, magazines, newspapers, academic journals and spoken texts.

The data from COCA is supposedly 4.5 times bigger than that of BNC. In order to make the comparison and contrast of the data of the two countries with more ease and simplicity, I made adjustments by dividing the COCA data by 4.5. After samples were gathered using these corpora and the adjustments were made on the

¹⁵⁾ The corpus used is Shogakkan's BNC, which is practically the same corpus as the original BNC except for a very small number of works which are excluded because of copy right.

¹⁶⁾ COCA stands for The Corpus of Contemporary American English created at Brigham Young University. Its site is: <http://corpus.byu.edu/coca/>

COCA data, the results on the following table are obtained.

Table 5 Frequency of occurrence of *at* and *by* in PE

PE	Britain		America		Total	
Verb \ Prep	at	by	at	by	at	by
alarmed	78	144	40	101	118	245
amazed	197	69	259	115	456	184
appalled	95	132	72	96	167	228
astonished	42	60	48	44	90	104
astounded	9	17	16	30	25	47
baffled	1	63	4	60	5	123
bewildered	6	81	6	44	12	125
dismayed	28	45	21	58	49	103
perplexed	3	19	3	33	6	52
shocked	94	229	117	227	211	456
startled	12	101	20	137	32	238
stunned	16	104	31	200	47	304
Total	581	1064	637	1145	1218	2209

There seems to be quite a similarity in the figures between the two countries. There are some discrepancies but the overall similarity seems to be obvious. The approximate ratios of *at* and *by* are shown together with the total figures on the following table.

Table 6 Total occurrences of *at* and *by* and their ratios in PE

PE	Britain		America		Total	
Prep	at	by	at	by	at	by
Frequency	581	1064	637	1145	1218	2209
Ratio	1	1.83	1	1.8	1	1.8

The ratio of Britain is 1 : 1.83, while that of America is 1 : 1.8, with the total ratio of 1 : 1.8. The similarity is so obvious that the obtained data may be said to be valid enough to reflect the actual situations of

Present-day English in the two countries.

6.2 Some observations

The ratios of Late Modern English, Present-day English and Dickens are shown below.

Table 7 The ratios of *at* and *by* in LModE, PE and Dickens

Prep	<i>at</i>	<i>by</i>
LModE	1	0.9
PE	1	1.8
Dickens	1	2.8

The ratio of *at* and *by* in Present-day English is roughly 1 : 1.8, while that of Late Modern English is 1 : 0.9. It means that there has been an increasing use of *by* with the psych-passives. As far as Dickens' usage is concerned, it may be said to be beyond Present-day English and seems to be looking further ahead.

In the history of the passives of English, there was a shift of agentive prepositions from *from*, *of*, *through*, *at*, *for*, *mid*, *with* to *by* (Mustanoja, 1960: 442; Visser, 1973: §§1987–2000; Ukaji, 1982: 389–90). The following examples from *The Canterbury Tales* of Chaucer (c 1343–1400) in (9) and from the plays of Shakespeare (1564–1616) in (10) would be a good illustration.

(9)

And bathed every veyne in swich licour **Of** which vertu engendred is the flour; (And bathed every sap-vessel in moisture, **By** virtue of which the flower is produced. *General Prologue*: 3–4); The grete Theseus, that of his sleep awaked **With** mynstralcie and noyse that was maked,

(Great Theseus was awoken out of his sleep **By** minstrelsy and noise . . .
Knight's Tale, 2523–25)

(10)

There lies the man, slain **by** young Romeo, (*Romeo and Juliet*, III.i.149);
I shall be saved **by** my husband. (*Merchant of Venice*, III.v.21); Be gov-
ern'd **by** your knowledge, and proceed. (*King Lear*, IV.vii.19)

It shows that in Chaucer's time, *of* or *with* was commonly used as an agentive preposition but in Shakespeare's plays two centuries later, *by* became the chief preposition.

The shift to *by* may have begun to take place around the 15th century (Jespersen, 1927: 317; Mustanoja, 1960: 374, 442; etc.) and it may have completed when *of* declined in the 17th century and finally *with* went into disuse around the middle of the 18th century after other prepositions had already disappeared in the earlier centuries (Araki-Ukaji, 1984: 254–57).

Judging from the fact that *by* seems to have been becoming the chief agentive preposition, the psych-passives may be following the same path trodden by the regular passives. There has been a few centuries delay in the shift to *by* and this delay may be explained for a couple of reasons. One is that psych-passives have such adjectival features as to hinder them from occurring with *by*, the typical preposition showing an agent for the passive, and thus, the possible delay.

Another reason for the delay may be that psych-passives are used for expressing emotions and feelings, which are so essential to humans that they are very frequently used in our daily life. Those

frequently-used verbal expressions and linguistic forms are said to die hard¹⁷⁾ and thus the retention of such ‘older’ prepositions as *with* or *at* and the delay of the shift to *by*.¹⁸⁾

6.3 Dickens’ peculiarity

Dickens has been said to be an innovative and even revolutionary novelist in his day. He utilized a variety of unconventional usages and constructions in his novels (Sørensen, 1985: 63–96). Dickens’s use of unconventional language is seen in his use of non-standard language. Blake (1981: 157) refers to Dickens as a writer who “introduced many varieties of non-standard language into his writings.” Tieken-Boon (2009: 18, 27, 80–81, 87–88) also states, “Dickens is perhaps most famous for the representation of non-standard speech in his novels” and elaborates the novelist’s use of non-standard English.

Dickens’s favor of unconventional language is also evident in his use of substandard grammar as is seen in Sørensen’s statement (1985: 63) that “There is no doubt that in some respects he tends to go beyond the limits of normal grammar.” Crystal (1995: 191) further states, “Charles Dickens pulls no punches when he finds an opportunity to satirize the grammatical tradition which held such power in British schools during the early 19th century.” This statement may summarize Dickens’ attitude toward the traditional grammar, which was prevalent in those days. Apparently, Dickens did not pay

¹⁷⁾ Baugh (1935: 65) suggests that the frequency of use may have to do with the longevity of certain expressions or grammatical forms as follows: “An examination of the words in an Old English dictionary shows that about eighty-five per cent of them are no longer in use. Those that survive, to be sure, are basic elements of our vocabulary, and by the frequency with which they recur make up a large part of any English sentences.”

¹⁸⁾ Taketazu, 2013: 41–42.

as much respect to the prescriptive traditional grammar as was exhibited by conservative writers of his time or later.

It would be small wonder if Dickens' spirit to use unconventional language had extended to the use of prepositions with psych-passives and, as a result, his usage had become quite different from the English of his day. As Sørensen (1985: 12) notes that "many – if not most – of the constructions, idioms, lexical items, and special uses of words that he introduced are current today", Dickens has been dubbed as a writer looking ahead toward the 20th century in terms of his style and grammar. His usage of *at* and *by* with psych-passives is totally different from his contemporaries and looks even beyond the 20th-century English and it may be said to be a forerunner of the future English.

7. Adjectives or passives?

7.1 Adjectival use

It has been claimed by a school of linguistics that sentences with psych-verbs in the past-participle form are adjectival constructions. The adjective's advocates claim that the following sentence, for instance, is an adjectival sentence, not a passive.

(11)

I was astonished by his stupidity / John. (Yasui and Hasegawa, 2000: 9)

Their claim is true to some degree because there exist a number of sentences with adjectival characteristics as in (12). The examples in (12a) are all attributive uses modifying nouns and those in (12b) are

used predicatively.

(12)

(a) “No-never!” replied the **astonished** Mr. Pickwick. (*PP*, ch.1); At sight of the **dismayed** look . . . (*OT*, ch.16); the **startled** visitors look round . . . (*BH*, ch.34); etc.

(b) At this discovery she became more **alarmed** than ever, (*BR*, ch.9); She looked as little **shocked** and as hopeful as she could, (*DS*, ch.53); For an hour or more, I remained too **stunned** to think... (*BH*, ch. 39); etc.

As Bailey (1996: 225–6) notes, “The drift of participles toward adjectives was . . . well-established before the beginning of the century . . . This process of participles becoming adjectives continued to accelerate during the nineteenth century.” There is no denying that past-participle forms of psych-verbs may have been functioning as adjectives in increasing numbers but it does not mean that all the past participles of psych-verbs have become adjectives.

In spite of there being sentences with adjectival features, there are also sentences which are to be judged as passives. Our claim may be confirmed, to begin with, by the definitions in the *OED* (1933) of such typical psych-verbs as *delight*, *please*, *shock* and *surprise*, which include the following descriptions that the verbs are used in the passive.

(13)

delight 1. Frequently in *pass.* (const. with *at*, *†in*, or with *infin.*)

please 4.a. *Passive. To be pleased. Const. with.*

shock 4. Often in *passive.*

surprise 5. Often *pass.*, const. *at* (†*with*) or *inf.*

Let us now show some evidence of passivity in sentences with psych-verbs in the past participle form in the following sections.

7.2 Active and passive voice correspondence

First, there are sentences in the active voice, which apparently correspond to sentences with psych-verbs in the past-participle form. The sentences in (14) are evidently pairs of actives and their corresponding passive sentences. ('A' before each sentence stands for active voice, 'P' for passive voice.)

(14)

(a) alarm

P, A: She **was alarmed by** an occurrence in the house which might have **alarmed** a stronger person, (*BH*, ch.14)

(b) amaze

A: There was a passionate dejection in his manner that quite **amazed** me. (*DC*, ch.22)

P: I sat all the while, **amazed by** Mr. Micawber's disclosure, (*DC*, ch.36)

(c) astonish

A: Our visit **astonished** him, evidently; not the less, I dare say, because it **astonished** ourselves. (*DC*, ch.52)

P: Stephen, himself profoundly **astonished by** this visit, put the candle on the table. (*HT*, ch.1)

(d) bewilder

A: he **bewildered** the old man. (*DS*, ch.17)

P: the good Captain **was so bewildered by** her attention. (*DS*, ch.49)

(e) perplex

A: The opposite troops, whose falling-in had **perplexed** Mr. Pickwick a few seconds before . . . (*PP*, ch.4)

P: Very much **perplexed by** the summary disposition of this person, Mr. Pickwick walked back . . . (*PP*, ch.42)

(f) shock

A: but his appearance **shocked** me. (*DC*, ch.35)

P: I **was so shocked by** the contents of this heart-rending letter, (*DC*, ch.17)

(g) startle

P, A: I sat counting the time . . . and waiting to **be startled by** the sight of the gloomy face, whose non-arrival **startled** me every minute. (*DC*, ch.14)

(h) stun

A: all this quite **stunned** and overwhelmed him. (*NN*, ch.52)

P: But he **is only stunned by** the unvanquishable difficulty . . . (*OMF*, ch.2)

Many sentences in the active voice are found to be used, together with the sentences with the same psych-verbs in the past-participle form, both in the same novel and this is not an exhaustive list. It shows that the sentences in the past-participle form in each pair are to be judged as passives since there are corresponding active counterparts. If those sentences are not passives, what grammatical term should be given them? If they are adjectival sentences, where are the passive sentences, when grammatically-corresponding active sentences obviously exist?

There may have been a consciousness in Dickens' mind that where there is an active-voice sentence with a psych-verb, there is a

corresponding passive sentence. Did he not use the agentive *by*-phrase so frequently simply because he was conscious that a sentence with a psych-verb in the past-participle form is a passive when there is an active counterpart?

7.3 Co-occurrence with a passive predicate

Secondly, there are sentences which have to be judged to be passives, not adjectives, as in (15).

(15)

(a) Ralph Nickleby and Gride, **stunned** and **paralyzed by** the awful event . . . (*NN*, ch.54)

(b) Why should she **be shocked** or **warned by** this reiteration? (*HT*, ch.23)

Stunned and *shocked* are used in coordination with the past-participle forms of the verbs *paralyze* and *warn*, respectively. *Paralyze* and *warn* are non-psychological verbs and therefore their past-participle forms are nothing but passives. Since *stunned* and *shocked* are coordinated with those passives, they must be judged to be passives as well.

These are not lonely examples and more can be found.¹⁹ They may be an eloquent testimony that psych-verbs in the past-participle forms are not always adjectives but they can occur as passives as well.

¹⁹ The following sentences to be judged as passives are also found: In his heart, Daniel Quilp was both **surprised** and **troubled by** the flight which had been made. (*OCS*, ch.13); Mrs. Cheeryble led Nicholas, equally **astonished** and **affected by** what he had seen . . . (*NN*, ch.35).

7.4 Passives as well as adjectives

From the observations and the arguments we have made so far, a conclusion must be drawn that sentences with psych-verbs in the past-participle form are not always adjectival constructions, but they can be passives as well, especially when they are accompanied by an agentive preposition *by*.

Epitomizing the adjectival theory, Yasui and Hasegawa (2000: 8–11, 66) enumerate adjectival features of the construction and present their arguments to substantiate their theory. They seem to overlook the fact, however, that there are cases where psych-verbs in the past-participle form have the obvious features of the passive as well.

They say, for instance, that the number of occurrences of the construction (that is, *-ed* form of psychological verbs) accompanying *by* is quite small but this claim is not the case as we have already shown abundant examples where psych-passives occur with *by*; in fact, *by* occurs nearly twice as frequently as *at*.

Our view may be supported by Fukumura's (1998: 179) such statements as “psychological verbs containing unpleasant feelings may involve passivity” or “it cannot be said that psychological verbs in the form of passive do not subsume passivity at all.”

Nevertheless, psych-passives and adjectival constructions are sometimes difficult to distinguish as Dennison (1998: 229) says that “the borderline between a passive and BE + predicate [i.e. an adjectival sentence] can be a murky one.”²⁰ In this sense, Huddleston and Pullum's (2002: 1436) terminology “adjectival passives” (vs. “verbal

²⁰ Dennison illustrates this by listing the following sentences: (a) Jim was amused by her tirade (passive); (b) Jim was amused; (c) Jim was amused at her tirade (predicative). He says that (b) sentence could be analyzed as either verbal or adjectival.

passives") to refer to a sentence like "They were very worried" may be more appropriate.

Theoretical arguments aside, it may be that Dickens felt that psych-verbs in the past-participle form were passives and so he began to make frequent use of *by*-phrase, the typical passive preposition, more and more in his novels during his writing career. Dickens' realization of the construction as passives, together with his spirit of freedom from the prescriptivism, may have made some contribution to the novelist's profuse use of *by*-phrase with the psych-passives.

8. Summary

We have seen Dickens' use of psych-passives with *at* or *by*, when the verbs are synonymous to *surprise*. Dickens uses *by* preferentially for most of the verbs except for *amaze* and *astonish*. The total occurrences of *at* and *by* is 62 times and 176 times each. The ratio is 1 : 2.8 and it means that Dickens uses *by* nearly three times more frequently than *at*.

This is very striking because his contemporary writers from the 18th and 19th centuries show a different tendency. They use *at* and *by* almost equally, with a slightly more preference for *at*, the ratio being 1 : 0.9. The comparison of Dickens' English with Present-day English also reveals an interesting outcome. The ratio of PE is 1 : 1.8. It follows that Dickens' usage is much further ahead of PE.

The comparison of Late Modern English and Present-day English shows an increase in the use of *by*. This suggests that the psych-passives may have been treading the same path as the regular passives, which have undergone the shift of the agentive prepositions:

the coalescence into *by*.

Concerning the constructions with psych-verbs in the past-participle form, theoretical linguists have claimed that they are not passives, but adjectival constructions. This claim may be partly true, but there are sentences with obvious passive features, which run counter to their claim: the sentences with the active-passive voice correspondence, and the sentences with the coordinated use of the passive predicates of non-psych-verbs and psych-verbs. It is, therefore, misleading to give an ultimate declaration that the constructions in question are all adjectival.

Dickens shows a strong inclination to use *by*-phrase with psych-passives. This peculiar usage of Dickens' may come from his recognition that the psych-verbs in the past-participle form are passives, together with his innovative spirit to use unconventional English. His usage may be said to be looking further ahead toward the future English.

References

- Bailey, Richard, W. 1996. *Nineteenth-century English*. Ann Arbor: The University of Michigan Press.
- Baugh, Albert C. 1935. *A History of the English Language*. London and New York: D. Appleton-Century.
- Blake, N. F. 1981. *Non-standard Language in English Literature*. London: André Deutsch.
- Bradley, Henry. 1904. *The Making of English*. London: Macmillan.
- Brook, G. L. 1970. *The Language of Dickens*. London: André Deutsch.
- Cawley, A. C. (ed.) 1958. *The Canterbury Tales*. (Everyman's Library) London: Dent.
- Close, R. A. 1975. *A Reference Grammar for Students of English*. London: Longman.
- Coghill, Nevill. (tr.) 1953. *The Canterbury Tales*. London: Penguin Books.
- Crystal, David. 1995. *The Cambridge Encyclopedia of the English Language*. Cam-

- bridge: Cambridge University Press.
- Dennison, David. 1998. "Syntax". In Romaine, Suzanne (ed.) *The Cambridge History of the English Language*, Vol. IV. Cambridge: Cambridge University Press.
- Fergusson, Rosalind. (ed.) 1992. *The Penguin Dictionary of English Synonyms and Antonyms*, rev. London: Penguin Books.
- Harrison, G. B. 1968. *Shakespeare: The Complete Works*. New York: Harcourt Brace Jovanovich.
- Hornby, A. S. 2012. *Oxford Advanced Learner's Dictionary*, 7th ed. Oxford: Oxford University Press.
- Huddleston, Rodney and Geoffrey K. Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Jespersen, Otto. 1927. *A Modern English Grammar on Historical Principles*. Vol. III. London: George Allen & Unwin.
- Marckwardt, Albert H. 1958. *American English*. Oxford: Oxford University Press.
- Murray, J. A. H., H. Bradley, W. A. Craigie and C. T. Onions ed. 1933. *The Oxford English Dictionary*, 12 vols and *Supplement*. Oxford: Clarendon Press.
- Mustanoja, T. F. A. 1960. *A Middle English Syntax*. Helsinki: Société Néophilologique.
- Nevalinen, Terttu. 2006. *An Introduction to Early Modern English*. Edinburgh: Edinburgh University Press.
- Palmer, F. R. 1975, 1988². *The English Verb*, 2nd edition. London: Longman.
- Quirk, R., S. Greenbaum, G. Leech and J. Svartivk. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Taketazu, S. 1999a. "Be surprised at or by?: The choice of preposition in Present-day English." *Nagasaki Prefectural University Journal*. Vol. 33, No. 1. 1-18.
- Taketazu, S. 1999b. "Be surprised by in the Corpus and the OED." *Nagasaki Prefectural University Journal*. Vol. 33, No. 2. 191-213.
- Taketazu, S. 2002. "Dickens's use of (be) surprised at/by construction." *Nagasaki Prefectural University Journal*. Vol. 36, No. 2. 1-17.
- Tieken-Boon van Ostade, Ingrid. 2009. *An Introduction to Late Modern English*. Edinburgh: Edinburgh University Press.
- Waley, Arthur (tr.). 1986. *The Tale of Genji*. Tokyo: Charles E. Tuttle Co.
- 荒木一雄・宇賀治正朋. 1984. 『英語史Ⅲ A』(英語学大系10) 大修館書店.
- 宇賀治正朋. 1981. 「シェイクスピアの受動文における動作主名詞句を導く前置詞」『現代の英語学』開拓社. 389-403.
- 福村虎次郎. 1965, 1998². 『英語の態: Voice』北星堂書店.
- 竹田津 進. 2008. 「Dickens は *be surprised at/by* 構文をどう使い分けたか？」田

- 島・末松編『英語史研究ノート』開文社. 266-270.
- 竹田津 進. 2014. 「心理述語 (*be*) *surprised* + *by* の意味変化」 *The Kyushu Review*. 27-49.
- 安井稔・長谷川ミサ子. 2000. 「心理動詞の -ed 形について」『英語青年』研究社. 8-11, 66.