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# The usage of *there* sentences with *become*: the relationship between change of state and appearance/occurrence<sup>1</sup>

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Numerous studies have investigated the kinds of verbs that can be used with *there* constructions. Generally, only existence and appearance verbs can occur in *there* constructions. However, some cases have been observed involving verbs not lexically expressing existence or appearance. This study focuses on *there* sentences with the verb *become* which are noteworthy in the following two respects. First, although the verb *become* is not an existence or appearance verb but a change-of-state verb, the verb is felicitously used with *there* constructions. Second, *become* is used without an adjectival or nominal complement, a unique argument realization pattern of the verb not found in other syntactic contexts. This study, based on a detailed examination of actual data in corpora, claims that *there* sentences with *become* express the appearance/occurrence of an entity. Although the postverbal noun is structurally a subject in *there* constructions and the subject of the verb *become* is usually interpreted as an entity undergoing a change, the postverbal noun of *there* sentences with *become* is an entity that has arisen as a result of the changing event.

**Keywords:** there constructions, become, coercion, semantics, corpus

## 1 Introduction

Numerous studies have investigated the kinds of verbs that can be used with *there* constructions. It is generally agreed that only existence and appearance verbs can occur in *there* constructions. However, some cases of *there* constructions have been observed involving verbs not lexically expressing existence or appearance. Previous studies such as Bolinger (1977) and Kuno & Takami (2004) have investigated semantic and syntactic constraints on the appropriate use of non-existence or non-appearance verbs. This study is also aimed at examining how and why non-existence or non-appearance verbs can function as the main verbs of *there* constructions.

In particular, this study focuses on *there* sentences with the verb *become*, as shown in (1a–c). Examples (1a) and (1b–c) are cited from the *iWeb Corpus* (iWeb; Davies 2018–) and the *Corpus of Contemporary American English* (COCA; Davies 2008–), respectively:

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- (1) (a) As more and more communities flourished, there became a need to connect them for the purposes of trade and other things.<sup>2</sup> (iWeb)
  - (b) <u>There becomes</u> a point in your band's career where everything is a make or break situation. (COCA: SPOK)
  - (c) As you age, there become fewer and fewer people whose advice is actually relevant. (COCA: MAG)

The sentences in (1a–c) are noteworthy in the following two respects. First, although the verb *become* is not an existence or appearance verb per se, but a change-of-state verb, the verb is felicitously used with *there* constructions. Second, *become* is used without an adjectival or nominal complement, a unique argument realization pattern of the verb not found in other syntactic contexts: the verb behaves like a one-argument verb in (1a–c). In addition, without complements, *become* has a special meaning not observed in ordinary structures. Thus, *there* sentences with *become* have idiosyncratic features concerning both *there* constructions and the verb *become*.

However, few studies have examined sentences such as (1a–c), with Kuzar (2012) being a rare exception. In this respect, the detailed investigation of *there* sentences with *become* helps elucidate the characteristics of both *there* constructions and the verb, a topic unexamined so far. This study, based on a detailed examination of actual data in corpora, claims that *there* sentences with *become* express the appearance/occurrence of an entity. Although the postverbal noun is structurally a subject in *there* constructions, and the subject of the verb *become* is usually interpreted as an entity undergoing a change, the postverbal noun of *there* sentences with *become* is an entity that has arisen as a result of the changing event. The change can be reinterpreted as the emergence of something new, and in particular, it seems to represent emergence (especially 'occurrence'), in the sense that the speaker subjectively focuses on only the resulting entity in the changing event. Thus, such sentences fit well with the construction's function of introducing new information and are acceptable as examples of *there* constructions. In other words, the 'emergence' meaning of *become* is considered caused (or coerced) by its use in *there* constructions.

This article is organized as follows. Section 2 reviews previous studies of the verb *become* and *there* constructions. Section 3 presents the detailed distributional, semantic and syntactic investigation of *there* sentences with *become*. Section 4 concludes this article.

### 2 Previous studies of the verb *become* and *there* constructions

Section 2 reviews studies on the verb *become* and *there* constructions. Section 2.1 presents basic usages of *become* regarding dictionary definitions and previous studies. Section 2.2 summarizes the kinds of verbs that can be used with *there* constructions. A review of such studies will indicate that although the usage of *there* sentences with *become* exhibits idiosyncratic features, very little research has been conducted on this expression.

<sup>&</sup>lt;sup>2</sup> All underlining was done by the author.

# 2.1 Basic usages of the verb become

The verb *become* is a linking verb that means 'to start to have a feeling or quality, or to start to develop into something', according to *the Longman Dictionary of Contemporary English* (6th edition; hereinafter, *LDOCE6*). Since the role of this type of verb is to link the subject of the sentence to a noun or an adjective, it must be followed by a complement phrase as in (2a–c):

- (2) (a) Pollution from cars has become <u>a major problem</u>. [the noun phrase]
  - (b) The weather became warmer. [the adjectival phrase]
  - (c) Slowly my eyes became <u>accustomed</u> to the darkness. [the past participle]

(LDOCE6)

The verbs in (2a–c) select the noun phrase, the adjectival phrase and the past participle, respectively. As a result of a certain event, the referent of the subject noun comes to be something or comes to be in some state described by the complement phrase. In contrast, the verb does not select an adverbial phrase as its complement as in (3). In addition, *become* cannot be used with locatives as in (4a–b); that is to say, sentence (4a) does not mean that Mary came to be at the office.

- (3) \* He became in his thirties. [the adverbial phrase]
- (4) (a) \*Mary became at the office. (Bresnan 1994: 76)
  - (b) \*A mouse became in the soup. (Ingria & George 1993: 120)

Based on these descriptions, if this study assumes, along the lines of almost all studies of *there* constructions, that postverbal noun phrases are logical subjects, rather than complement phrases, the usage of *there* sentences with *become* in (5a–c) seems exceptional in that no complement phrases occur. That is to say, as the noun phrases *a need* and *a point* are the logical subjects of the *there* sentences in (6a–c), the noun phrases *a need*, *a point* and *fewer and fewer people* are also considered the logical subjects of the *there* sentences in (5a–c).

- (5) (a) As more and more communities flourished, there became  $\underline{a} \underline{need}$  to connect them for the purposes of trade and other things. (iWeb) (=(1a))
  - (b) There becomes <u>a point</u> in your band's career where everything is a make or break situation. (COCA: SPOK) (=(1b))
  - (c) As you age, there become <u>fewer and fewer people</u> whose advice is actually relevant. (COCA: MAG) (=(1c))
- (6) (a) There is a need to revise the financial schema. (constructed)<sup>3</sup>
  - (b) There comes a point when you have to face reality. (constructed)
  - (c) There arose a need to revise the financial schema. (constructed)

The use of the verb *become* without complement phrases is not allowed in (7a–c), the sentences that are supposed to correspond semantically to the examples in (5a–c):

<sup>&</sup>lt;sup>3</sup> All constructed sentences in this article were created by native English speakers.

- (7) (a) \*As more and more communities flourished, a need to connect them for the purposes of trade and other things became. (constructed)
  - (b) \*A point becomes in your band's career where everything is a make or break situation. (constructed)
  - (c) \*As you age, fewer and fewer people whose advice is actually relevant becomes. (constructed)

Therefore, the use of the verb *become* without complement phrases is the idiosyncratic pattern only observed in *there* constructions.

#### 2.2 Verbs in there constructions

This section outlines the types of verbs usable in *there* constructions (e.g. Bolinger 1977; Milsark 1979; Lumsden 1988; Breivik 1990; Erdmann 1990; Levin & Rappaport Hovav 1995; Kuno & Takami 2004). Generally, only (unaccusative) verbs denoting existence or appearance are acceptable in *there* constructions because the main function of *there* constructions is to present a new entity to the discourse, and existence and appearance verbs effectively fulfill this pragmatic role. Compare (8a–c) and (9a–c):

- (8) (a) There is a flowering plant on the windowsill. (Levin 1993: 88)
  - (b) There <u>remained</u> three documents on his blotter when he pressed his desk bell. (Levin & Rappaport Hovav 1995: 150)
  - (c) There began a riot. (Milsark 1979: 16)
- (9) (a) \*There slowed a train on the eastbound track. (Deal 2009: 286)
  - (b) \*There broke a candle. (Irwin 2012: 74)
  - (c) \*There melted a lot of snow on the streets of Chicago. (Levin 1993: 90)

The verbs used in (8a–c) denote existence or appearance. In contrast, examples in (9a–c) are not acceptable because the verbs are not classified as either existence or appearance verbs.

Allow me to introduce two studies with comprehensive lists of verbs: Erdmann (1990) and Levin (1993). Interestingly, even these comprehensive studies do not refer to *become* as a candidate for the main verb in *there* constructions.

Erdmann's (1990) verb list:

**verbs of position or being**: exist, hang, lack, lie, live, loom, reside, run 'stretch', sit, spread, stand, wait, want 'lack'

**verbs of occurring and happening**: beat (heart), come 'arise', develop, echo, form, go 'pass', happen, occur, sound, unfold

**verbs of motion**: come, depart, enter, float, gather, intrude, lurch, move, paw, run, travel **aspectual verbs**: appear, begin, diminish, emerge, open, persist, remain, rise, show (itself/oneself), start, survive, vanish (Erdmann 1990: 67–8)

Levin's (1993) verb list:

**verbs of existence**: blaze, bubble, cling, coexist, correspond, decay, depend, drift, dwell, elapse, emanate, exist, fester, float, fly, grow, hide, hover, live, loom, lurk, overspread, persist,

predominate, prevail, project, protrude, remain, revolve, reside, rise, settle, shelter, smolder, spread, stream, survive, sweep, swing, tower, wind, writhe

**verbs of spatial configuration**: crouch, dangle, hang, kneel, lean, lie, perch, rest, sit, slouch, sprawl, squat, stand, straddle, stretch, swing

**meander verbs**: cascade, climb, crawl, cut, drop, go, meander, plunge, run, straggle, stretch, sweep, tumble, turn, twist, wander, weave, wind

verbs of appearance: accumulate, appear, arise, assemble, awake, awaken, begin, break, burst, dawn, derive, develop, emanate, emerge, ensue, evolve, exude, flow, follow, gush, happen, issue, materialize, occur, open, plop, rise, spill, steal, stem, supervene, surge

**verbs of inherently directed motion**: arrive, ascend, come, descend, drop, enter, fall, go, pass, rise

**verbs of manner of motion**: amble, climb, crawl, creep, dance, dart, flee, float, fly, gallop, head, hobble, hop, hurtle, jump, leap, march, plod, prance, ride, roam, roll, run, rush, snail, shuffle, skip, speed, stagger, step, stray, stride, stroll, strut, swim, trot, trudge, walk

verbs of sound emission: beat, boom, chime, ring, rumble, shriek, tick

verbs of sound existence: echo, resound, reverberate, sound

**verbs of light emission**: flare, flash, flicker, gleam, glimmer, glisten, glitter, scintillate, shimmer, shine, sparkle, twinkle

verbs of substance emission: belch, puff, radiate

other verbs: chatter, doze, idle, labor, lounge, preside, reign, sing, sleep, toil, wait, work

(Levin 1993: 89-90)

The neglect of *become* in the studies is not surprising because the semantic constraint on verbs predicts that the verb *become* cannot be used in *there* constructions. Some studies explicitly mention the unacceptability of the verb *become* in *there* constructions, as in (10a–b):

- (10) (a) \*There became a mouse in the soup. (Ingria & George 1993: 120)
  - (b) \*There became a man (conspicuously absent). (Brandt 2003: 34)

However, as repeatedly mentioned above, the verb *become* can be used in *there* constructions.

Some studies such as Bolinger (1977) and Kayne (1979) present examples of *become* as in (11), but this pattern is outside our scope because it does not violate the ordinary argument realization pattern of *become* in that the verb is followed by the adjectival phrases. These examples are acceptable because the combination of *become* and the particular type of adjectives such as *visible* enables the sentences to express the existence or appearance of an entity.

- (11) (a) There became visible a faint discoloration just below the surface. (Bolinger 1977: 90)
  - (b) There became available a great many seats. (Kayne 1979: 715)

To the best of my knowledge, only two studies, Jenset (2010) and Li (2017), include *become* in their verb lists. Jenset (2010), a quantitative historical study, found *there* sentences with *become* using three types of historical corpora (the *York–Toronto–* 

Helsinki Parsed Corpus of Old English, the Penn–Helsinki Parsed Corpus of Early Modern English and the Penn–Helsinki Parsed Corpus of Early Modern English, 2nd edition). Moreover, Li (2017) reported that there sentences with become were observed in COCA. Nevertheless, these two studies do not, unfortunately, provide examples of there sentences with become nor do they discuss their behaviors.<sup>4</sup>

As far as I know, Kuzar (2012) is the only study to investigate *there* sentences with *become* (without the adjectival phrases) found in present-day English. Kuzar (2012: 68) makes the following observations:

In the translation of the Scriptures, the copular verb *become* is sometimes used (10a–b) [= (12)]. In Modern English, such behavior might occur, see (10c) [=(13)], but it is quite unusual. It is perhaps not completely accidental that this sentence originates in the Bible Belt of the US and addresses a question of faith in an archaicizing style. (Kuzar 2012: 68)

- (12) (a) And there became light. (Gen. 1.3)
  - (b) And there became a great calm. (Matt. 8.26)
- (13) In Texas, there was a case called Tilden v. Moyer, where Mr. Tilden was an evangelist and ran a church and there became a dispute over whether his claims of healing were accurate claims. (web)

(Kuzar 2012: 68)

Kuzar (2012) is exceptional for the brief reference to the usage of *there* sentences with *become*. However, satisfactory analyses of how and why *become* can be used with *there* constructions are lacking. Thus, more research is necessary to reveal the special usages of *there* sentences with *become*. It would be beneficial for the study of both *become* and *there* constructions to investigate *there* sentences with *become*.

### 3 Usages of *there* sentences with *become*

Section 3 investigates the syntax and semantics of *there* sentences with *become* based on actual examples from corpora. Because of the rarity of such examples, this study used many corpora to collect examples: the *British National Corpus* (BNC; Davies 2004–), COCA, the *Coronavirus Corpus* (Coronavirus; Davies 2019c–), iWeb, the *Movie Corpus* (MOV; Davies 2019a–), the *NOW Corpus* (NOW; Davies 2016–), the *TV Corpus* (TV; Davies 2019b–) and the *Wordbanks Corpus* (WB).

Because the scope of this article is not historical but synchronic, it does not attempt to conduct a detailed historical study and reserves historical issues for future studies.

<sup>&</sup>lt;sup>4</sup> The verb *become* meant to 'come (to a place), to arrive'; passing in later use into 'betake oneself, go' in the past, according to the *Oxford English Dictionary (OED)*. However, whether Jenset's examples are the target of my study remains unclear because they might have occurred with the adjectival complements. Notably, most *there* sentences with *become* occurred with adjectival complements in the *Corpus of Historical American English* (COHA; Davies 2010–).

Section 3.1 investigates the frequency of *there* sentences with *become*. Sections 3.2 and 3.3 then examine the meanings of such sentences and show that they denote the appearance or occurrence of the postverbal noun referent. Sections 3.4 and 3.5 examine the syntactic behavior of *there* sentences with *become*.

# 3.1 Frequency

This section investigates the number of examples of *there* sentences with *become* present in the three genre-balanced corpora: COCA (1.0 billion words), BNC (100 million words) and WB (600 million words). When examining WB, this study excluded the following seven subcorpora because these are composed of historical or translated examples: *UK books2 fiction/non-fiction* (1813–1901), *UK children's fiction* (1847–1930), *US children's fiction* (1849–1900), *US books; fiction* (1726–1905), *Canadian novels (children's fiction)* (1872–1909), *South African Newspaper (Johncom Media)* and *German Fairy Tales* (1843). As a result, the size of WB amounted to 593,277,823 words. The corpora were scanned for *there* sentences with *become* using the following seven search strings: *there became*, *there become*, *there become*, *there has become*, *there have become*, *there had become* and *there vm become*.

Since previous studies have seldom discussed *there* sentences with *become* and the use of the verb *become* violates the semantic restriction on verbs in *there* constructions, it might be thought that *there* sentences with *become* can never be found even in large corpora such as COCA and BNC. However, a review of COCA, BNC and WB databases revealed that *there* sentences with *become* are relatively common (tables 1 and 2). Table 1 presents the raw and normalized frequencies (per one million words) of the seven forms of *there* sentences with *become* in COCA, BNC and WB. Table 2 provides the genre-based distribution of *there* sentences with *become* in COCA; the subsections of COCA are fiction (FIC), magazine (MAG), newspaper (NEWS), academic (ACAD), spoken (SPOK), TV shows (TV), movies (MOV), blog (BLOG) and web (WEB). The example for each form, except *there have become* and *there had become*, is given in (14a–e):

- (14) (a) "There became a growing suspicion that glasswork wasn't done with the effort that one would consider as going with an important piece of art," said Ferdinand Hampson, president of Habatat Galleries. (COCA: NEWS)
  - (b) And that's when there become some health risks with this. (COCA: SPOK)
  - (c) <u>There becomes</u> a moment when you might have to check your moral compass and your gut, and figure out what's the right thing to do. (COCA: MOV)
  - (d) Over the last decade or two decades, increasingly, there has become this sense of partisan warfare all year long. (COCA: SPOK)

<sup>&</sup>lt;sup>5</sup> This study collects examples with modals through this search in COCA and BNC. In WB, a different string, there ~P(VM0) become, is used.

Table 1. Raw and normalized frequencies (per one million words) of there sentences with become in COCA, BNC and WB <sup>6</sup>					
	COCA	BNC	WB		
there became	14	3	9		

	COCA	BNC	WB
there became	14	3	9
	(0.014)	(0.031)	(0.015)
there become	12	0	1
	(0.012)	(0)	(0.002)
there becomes	27	2	6
	(0.027)	(0.021)	(0.010)
there has become	7	0	4
	(0.007)	(0)	(0.007)
there have become	0	0	0
	(0)	(0)	(0)
there had become	0	0	0
	(0)	(0)	(0)
there vm become	5	1	2
_	(0.005)	(0.010)	(0.003)
Total	65	6	22
	(0.065)	(0.062)	(0.037)

Table 2. Genre-based frequency of there sentences with the verb become in COCA

	FIC	MAG	NEWS	ACAD	SPOK	TV	MOV	BLOG	WEB
there became	0	0	2	1	4	0	3	1	3
there become	1	2	1	1	5	1	0	1	0
there becomes	0	2	1	1	10	1	1	7	4
there has become	0	1	1	0	2	0	0	1	2
there have become	0	0	0	0	0	0	0	0	0
there had become	0	0	0	0	0	0	0	0	0
there vm become	0	1	1	0	2	0	0	0	1
Total	1	6	6	3	23	2	4	10	10

(e) When the football interests of our members would take precedence over the needs of the basketball schools, I thought there would become some kind of a separation. (COCA: NEWS)

In total, 65, 6 and 22 examples were found in COCA, BNC and WB, respectively. Thus, it is not the case that no *there* sentences with *become* can be found in large corpora. Moreover, many of the expressions, especially *there becomes*, were observed in the spoken genre in COCA. Their frequent use, especially in the present tense, in the spoken genre is noteworthy because a large number of previous studies have claimed

<sup>&</sup>lt;sup>6</sup> Here again, examples with adjectival complements are excluded from my corpus research.

that *there* sentences with non-*be* verbs are basically used in written genres such as fiction (e.g. Johansson 1997; Biber *et al.* 1999; Martínez Insua 2004). This issue will be discussed again in the next section.<sup>7</sup>

Because only looking at the results of *there* sentences with *become* is not enough to grasp the accurate distribution of such examples, this study investigates the frequency of five other verbs (*arrive*, *hang*, *run*, *swim* and *walk*) in *there* sentences. These five verbs are often used in the literature on *there* constructions, as in (15a–e):

- (15) (a) There had arrived a lot of buses and military tanks. (Duffley 2020: 150)
  - (b) There <u>hung</u> a picture of Moses on the wall. (Stowell 1978: 468)
  - (c) Suddenly there ran out of the bushes a grizzly bear. (Aissen 1975: 2)
  - (d) There swam towards me someone carrying a harpoon. (Lumsden 1988: 38)
  - (e) There walked into the bedroom a unicorn. (Milsark 1979: 246)

Table 3 presents the raw and normalized frequencies (per one million words) of seven forms of there sentences with arrive, hang, run, walk and swim in COCA, BNC and WB, similar to there sentences with become. As can be seen comparing table 1 and table 3, there sentences with become are found more often than those with these five verbs in COCA. In addition, there sentences with become are more often attested than those with arrive, run, swim and walk in WB. Thus, the use of there sentences with become is not extremely rare. However, surprisingly, the usage has been ignored for such a long time. Few previous studies have observed the existence of there sentences with become; however, some native speakers of English use such sentences.

## 3.2 Reinterpretation of change as appearance/occurrence

This section investigates the semantics of *there* sentences with *become*. Close observation of examples in (16a–d) shows that they express the appearance/occurrence of referents of postverbal nouns. For example, (16a) denotes the coming-into-being event of considerable concern:

- (16) (a) There became a tremendous amount of concern about the potential for the population to go extinct, and recovery efforts were undertaken. (TV: 2017)
  - (b) As information was rolling in, <u>there became</u> a realization that there needed to be more structured communication tree [sic]. (Coronavirus: US (20-03-15))
  - (c) But as the days wore on, there became a possibility that Juliette could be transferred to the NICU at Midtown Medical Center in Columbus. (NOW: US (16-11-23))
  - (d) Following the retirement of the manager for John's Kitchen, there became an opportunity to apply for the manager's position. (NOW: NZ (16-6-21))

As a reviewer points out, the frequencies are so low in table 2 that it is not possible to make any statistical generalizations.

	COCA	BNC	WB
arrive	18	12	11
	(0.018)	(0.125)	(0.019)
hang	43	9	36
	(0.043)	(0.093)	(0.061)
run	10	9	13
	(0.010)	(0.093)	(0.022)
swim	2	1	0
	(0.002)	(0.010)	(0)
walk	6	0	0
	(0.006)	(0)	(0)

Table 3. Raw and normalized frequencies (per one million words) of there sentences with arrive, hang, run, swim and walk in COCA, BNC and WB

The fact that the verbs in (16a–d) are substituted with genuine appearance verbs, such as *appear*, *arise* and *emerge*, as in (17a–d), verifies the appearance meaning of *become*:

- (17) (a) There arose a tremendous amount of concern about the potential for the population to go extinct, and recovery efforts were undertaken. (constructed)
  - (b) As information was rolling in, <u>there emerged</u> a realization that there needed to be a more structured communication tree. (constructed)
  - (c) But as the days wore on, <u>there appeared</u> a possibility that Juliette could be transferred to the NICU at Midtown Medical Center in Columbus. (constructed)
  - (d) Following the retirement of the manager for John's Kitchen, <u>there emerged</u> an opportunity to apply for the manager's position. (constructed)

Interestingly, contrary to the claim by Kuzar (2012), examples are not restricted to religious contexts; for example, (16b) and (16c) were found in medical contexts. Thus, although *there* sentences with *become* are indeed novel and infrequent, they are nevertheless stored in the linguistic knowledge of native English speakers and uttered in various situations.

Among the attested nouns in the corpora, two types of nouns are frequently used: *need* and temporal nouns such as *point* and *time* as in (18a–e) and (19a–d).

- (18) (a) "We're putting together mockups of the systems we're designing and there became <u>a</u> <u>need</u> to find more shops other than the local shops we rely on for small builds and quick turnaround items," he said. (COCA: ACAD)
  - (b) This is the reason why there became <u>a need</u> for a mod such as More Player Models. (iWeb)
  - (c) It is not being used yet but was readied in case there becomes <u>a need</u> to address surge capacity in response to COVID-19. (Coronavirus: US (20–04–17))

- (d) When there are two people working together, there becomes <u>a need</u> to communicate back and forth. When there are three, there becomes <u>a need</u> to coordinate tasks, etc. (NOW: US (20–11–17))
- (e) With the booming population of the military and the public in Hawaii, there became <u>a</u> need for even more and more power plants, mostly using oil to steer them. (iWeb)
- (19) (a) There becomes a point in your band's career where everything is a make or break situation. (COCA: SPOK)
  - (b) There becomes <u>a tipping point</u> when accumulated injustice overwhelms one's resources to handle or ability to accommodate it. (NOW: US (20–06–28))
  - (c) Stay and fight. There becomes a time when you have to cut bait and go, and I believe very strongly this is the time. (COCA: SPOK)
  - (d) There becomes <u>a moment</u> when you might have to check your moral compass and your gut, and figure out what's the right thing to do. (COCA: MOV)

For example, 6 out of 27 examples of *there becomes* in COCA and 2 out of 6 examples of *there becomes* in WB are used with time nouns such as *point* and *time*, and the use of time nouns in the present tense is thus one of the characteristics of *there become*.

The examples in (19a–d) operate in a way similar to the examples in (20a–b), where *there* sentences with the verb *come* select temporal nouns for their subjects, especially in the present tense. Interestingly, about 80 percent of the subject nouns of *there* sentences with *comes* are time nouns such as *time* or *point* in COCA and BNC (Mino 2020). In the case of (20a–b), *there* sentences with *comes* denote the appearance of a certain time:

- (20) (a) There comes a point in your adult life when you realize that you're really the only one who can decide how you live. (COCA: TV)
  - (b) There comes <u>a time</u> in every company's growth when an employee manual really is essential. (COCA: MAG)

Despite the use of the different types of verbs, both the sentences in (19a–d) and (20a–b) are interpreted similarly to aphorisms, which are concise statements that illustrate a general truth and/or principle (e.g. *A bad penny always turns* up; *You have to take the good with the bad.*). For example, (20a) means that in one's adult life, a certain time comes when you realize that you're really the only one who can decide how you live. This similarity between (19a–d) and (20a–b) suffices as evidence of *there* sentences with *become* expressing appearance.

We are now in a position to answer the following two questions to identify the general characteristics of *there* sentences with *become*: (i) what is the semantic role of the postverbal noun and (ii) why can the verb *become* be used in *there* constructions? Here we would like to consider these issues based on example (18e).

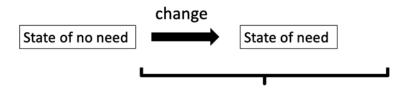
Let us first consider the semantic role of the postverbal noun phrase. The noun phrase *a need* is structurally a logical subject in *there* constructions, and the subject of the verb *become* should be interpreted as an entity undergoing a change in canonical SV patterns. However, the postverbal noun in *there* sentences with *become* is an entity that

has arisen as a result of the changing event. That is to say, in the case of (18e), as a result of the 'booming population of the military and the public in Hawaii', there arises 'a need for even more and more power plants, mostly using oil to steer them'. Thus, in this *there* construction, elements not normally found in the subject appear in the subject position.

Now, let us tackle the second question: why can the verb *become* be used in *there* constructions? We claim that change can be reinterpreted as the emergence of something new, and in particular, the verb seems to represent emergence (especially 'occurrence'), as the speaker subjectively focuses on only the resulting entity in the changing event. Thus, it fits well with the function of introducing new information in *there* constructions and is acceptable as an example of *there* constructions. This may roughly be diagrammed as in figure 1. Some entity is considered to occur as the consequence of the changing event.

There are other *there* sentences, the postverbal nouns of which are interpreted as resulting entities. For example, the verb *result* is classified as a verb of appearance in Levin (1993: 258) and thus selected as a main verb of *there* constructions, as in (21a–c). Less frequent examples are those with the verb *materialize*, as in (22a–b), and this verb is also a verb of appearance in Levin (1993: 258).

- (21) (a) If this process goes on long enough, parent and daughter species can no longer interbreed, and there results a new species. (*OED2*)
  - (b) There results a rupture between the innate classicism of his dancers and the tics of his mannerisms, which distorts but does not illuminate the qualities of his cast. (NOW: GB (12–04–09))
  - (c) As the sea cuts into the land, the cliff collapses and the collapsed material is broken down and transported away, there results the slow development of a wavecut platform. (BNC: written)



This can be seen as the emergence of a need.

Figure 1. Reinterpretation of the changing event as the emergence of a need

Although result and materialize are listed in the verb list of Levin (1993), there sentences with these two verbs are less frequently found than those with become.

- (22) (a) And <a href="materialized">there materialized</a> a rainbow to the port side (at my ten o'clock), a great bow of color shimmering in the mist, almost making a complete circle meeting somewhere under the surface of the water. (COCA: FIC)
  - (b) And women themselves are hardly monolithic; when Warren tweeted about billionaires, there materialized a thread of responses accusing her of pandering – presumably, to female voters – and others accusing her of not pandering enough. (NOW: US (19– 12–15))

Each sentence above denotes the occurrence of a resulting entity, suggesting that logical subjects can be interpreted as resulting entities.

Nevertheless, it is important to note here that the two verbs, *result* and *materialize*, can express the occurrence of a resulting entity even in the ordinary intransitive construction, which is radically different from *become*:

- (23) (a) Anger may result from an argument. (OED2)
  - (b) Problems were expected, but they never materialized. (LDOCE 6)

Thus, only the verb *become* exhibits the abnormal argument selection pattern when occurring in *there* constructions. Theoretically, the 'emergence' meaning of *become* is considered caused (or coerced) by its use in *there* sentences. That is to say, the construction adds a semantic and formal property to the sentences, and thus, the original properties of the verb *become* are replaced or removed.

# 3.3 What type of appearance/occurrence does the sentence represent?

This section elaborates on the kinds of appearance/occurrence the expression can represent. First, *there* sentences with *become* cannot express the physical appearance of concrete entities, such as humans and animals, as shown in (24a–c):

- (24) (a) \*From the room, there became a handsome man. (constructed)
  - (b) \*There became into the park very young men. (constructed)
  - (c) \*There became a mouse in the soup. (=(10a))

In the case of (24a–c), there has only been a positional change in the persons or animals, but no internal change has occurred in them. They were not suddenly born from somewhere. They existed before the change, and they did not come into being as a result of a location change. This unacceptability of human and animal nouns is a difference from *there* sentences with *appear* and *emerge*, as in (25a–b). These sentences can freely express a locational change of the referent of the subject noun.

<sup>&</sup>lt;sup>9</sup> See Audring & Booij (2016) for coercion.

When the verb become is followed by an adjectival complement, a physical entity can be used as its subject. In (i), a locational change of a referent of the subject noun is described.

<sup>(</sup>i) There became visible in the distance far up the road the heavily plodding figure of another woman who had agreed to come and help. (COCA: FIC)

- (25) (a) Behind the lady there appeared <u>an elderly woman</u> who made gestures and movements with her mouth, as if she wanted to say something. (COCA: FIC)
  - (b) Suddenly there emerged <u>a thirty-year-old woman</u> wearing a navy blue suit and talking intensely on her comm. (COCA: FIC)

In contrast, *there* sentences with *become* are required to express a change of state because of its lexical meaning.

The discussion by Kuzar (2012) is useful in elaborating on the kind of appearance *there* sentences with *become* can represent. Consider the sentences with the verb *develop* from (26a–b) through to (28). *Develop* can be used as the main verb of *there* sentences because this verb lexically expresses a certain kind of occurrence, as in (26a–b). In fact, according to *LDOCE6* regarding the example in (27), 'if a problem or difficult situation develops, *it begins to happen or exist*, or it gets worse' (emphasis added). This definition indicates the close relationship between 'change of state' and 'occurrence'. It naturally follows then that (28) with a human noun is not acceptable.

- (26) (a) There developed some unrest. (Lumsden 1988: 38)
  - (b) There developed at the meeting many terrible objections. (Milsark 1979: 250)
- (27) Trouble is developing in the cities. (*LDOCE6*)
- (28) \* During this time, there develops a child very rapidly. (Kuzar 2012: 148)

According to Kuzar (2012: 148), (28) is unacceptable because 'a child cannot "develop" in the sense of "coming gradually into being". In other words, the verb *develop* can only be used when it expresses 'coming gradually into being'. When something changes (gradually) and crosses a threshold at a certain point, it is seen as an emergence.

To test whether this is the case, let us look at more *there* sentences with *become*. Consider examples (29a–b). These two examples describe the emergence of physical entities, rather than abstract ones, but are still acceptable:

- (29) (a) Also, know your limits as a boat operator and pay attention to what the weather is going to do, not just what the weather is doing at that time. An overloaded boat can become very dangerous when there becomes a heavy chop on the water. (NOW: US (21–09–08))
  - (b) It was a big deal, and I think it was probably late Saturday or maybe early Sunday, Charlie Cartwright, Jack Rudy, and two or three of their customers came onto the convention floor. And everybody saw them, and all of a sudden there became this kind of crowd around them, like, you know, people amazed by this tattooing. (MOVIE: 2013)

Example (29a) is a sentence describing the occurrence of a wave, and it is acceptable because it describes a wave that has become higher, not one that came from the other side. Thus, as a result of the rise of waves, there arose a giant wave. Example (29b) is acceptable because it describes how those who saw the tattoos of Charlie Cartwright, Jack Rudy and so on were startled and gathered around them, resulting in a crowd. In other words, (29b) describes a crowd arising, not the movement of a crowd that originally existed.

Let me now turn to contexts wherein *there* sentences with *become* are preferred. Since this pattern denotes the occurrence as a result of some changing event, it is natural that it often co-occurs with the conjunction *as*, as in (30a–c) and (31a–c), because the conjunction is 'used to indicate that something happens during the time when something else is taking place' (*OED2*). *There* sentences with *become* can occur in main clauses as in (30a–c) or in *as*-clauses, as in (31a–c):

- (30) (a) As more and more communities flourished, there became a need to connect them for the purposes of trade and other things. (=(1a))
  - (b) As information was rolling in, there became a realization that there needed to be more structured communication tree. (=(16b))
  - (c) As the number of hungry increased there became a need for the food bank.

(NOW: CA (17–06–27))

- (31) (a) "<u>As</u> time progressed and there became greater concern about the impact of phosphate mining, these became very large environmental assessments," Fellows said, calling the assessments "books" on impacts of individual mines. (NOW: CA (17–06–27))
  - (b) <u>As</u> that story evolved over time and <u>as</u> there became more public awareness that she was stuck in this conservatorship, seemingly against her will, our focus began to shift to investigate that, more than exploring the cultural phenomenon of Britney. (NOW: US (21–10–13))
  - (c) "As there becomes a greater concentration of stock ownership among a few firms," he said, "they need to make sure that shareholders know why they've made the decisions they have." (NOW: US (19–02–19))

The following sentences occur in other contexts that emphasize the (gradual) change:

- (32) (a) With the rise of international empires and trade links, the cheap mass-production of goods and expanding wealth through all sectors of society, there became a greater demand for goods. (iWeb)
  - (b) But <u>over the years</u>, there became a new version of it that was much more public and interested in trying to express that they were creating a positive change in the world that went along with their wealth. (NOW: US (21–10–04))

Examples (32a–b) describe the change of circumstances with the help of with the rise of and over the years. In addition, nouns with comparative adjectives are often used as a subject of there sentences with become, as in (33a–b) and (34a–b). See also (31a–b) and (32a).

- (33) (a) "From the very beginning of the pandemic, there became more and more issues with the way that we would normally transport folks," spokesperson Jeremy Desel said. (NOW: US (20–07–23))
  - (b) But if the supply isn't there, I think there becomes <u>more and more public pressure</u> to have a ZEV mandate. (NOW: CA (18–11–19))
- (34) (a) As you age, there become <u>fewer and fewer people</u> whose advice is actually relevant. (COCA: MAG) (=(1c))

(b) How did you get along as things changed, as there became more French people in the area? (WB: spoken)

Interestingly, although the subject nouns of (34a–b) are human, *fewer and fewer people* and *more French people* are still acceptable. This is because these sentences denote the increase in the number of people, rather than their physical appearance. Thus, *there* sentences with *become* tend to be used when the result of the (gradual) change is construed as the appearance of a new state. <sup>11</sup>

### 3.4 Co-occurrence with locatives

This study has demonstrated that *there* sentences with *become* express appearance/ occurrence. This gives rise to a new question: if the sentences can express appearance/ occurrence, can they co-occur with locative phrases?

As discussed in section 2.1, the verb *become* cannot be used with locatives in the canonical SV order, as in (35a–b). However, *there* sentences with *become* can co-occur with locatives, as in (36a–c) and (37a–c): the locatives appear directly after the verbs in (36a–c), but not in (37a–c).

- (35) (a) \*Mary became at the office. (Bresnan 1994: 76)
  - (b) \*A mouse became in the soup. (Ingria & George 1993: 12) (=(4))
- (36) (a) There became in him a sense that he was being watched. (constructed)
  - (b) There became in their relationship a tension that wouldn't go away. (constructed)
  - (c) At that time, there became <u>in Rome</u> an internal struggle between Julius Caesar and Gnaeus Pompeius Magnus. (constructed)
- (37) (a) There becomes a point <u>in your band's career</u> where everything is a make or break situation. (COCA: SPOK) (=(1b))
  - (b) When no obvious suspect emerges, when investigations grind to a halt, tunnel vision often sets in. In the minds of police, there becomes only one suspect, and all the circumstantial evidence seems to point to them and render all irregularities coincidence. (NOW: CA (14–11–15))
  - (c) We were very fortunate that we were able to cut through the clutter early on, before there became such a huge proliferation of labels in the area. (NOW: US (11-01-20))

Examples (36a–c) and (37a–c) suffice as evidence that *there* sentences with *become* express the appearance/occurrence in the designated space. The use of the locative with

<sup>11</sup> There are some examples with words showing that the change has taken place rapidly. Therefore, the event does not always have to be a gradual change.

<sup>(</sup>i) <u>Suddenly</u>, there became space for producers distributing smaller films, which, in turn, meant more competition for the services of entertainment workers. (NOW: US (21–05–28))

<sup>(</sup>ii) "All of a sudden, there became an explosion of street level agencies," he says. (NOW: US (14–10–16))

the verb *become* in (38a–c) is not allowed, although these three (equally constructed) sentences semantically correspond to the examples in (36a–c):<sup>12</sup>

- (38) (a) \*A sense became in him that he was being watched. (constructed)
  - (b) \*A tension became in their relationship that wouldn't go away. (constructed)
  - (c) \*At that time, an internal struggle between Julius Caesar and Gnaeus Pompeius Magnus became in Rome. (constructed)<sup>13</sup>

Finally, let us consider the position of postverbal nouns and locatives. According to Milsark (1979), *there* constructions with non-*be* verbs are classified into two types: the inside verbal, as in (39a), and the outside verbal, as in (39b). In the inside verbal, the noun phrase is located immediately following the main verb, while, in the outside verbal, it shows up to the right of the entire verb phrase. Generally, the inside verbal constructions are subject to the more severe restriction on verbs than the outside verbal constructions in that only existence or appearance verbs can occur in the inside verbal, but other types of verbs can participate in the outside verbal. <sup>14</sup> For example, the unergative verb *swim* cannot be used in the inside verbal in (40a).

- (39) (a) There began a rainstorm. [inside verbals] (Milsark 1979: 246)
  - (b) There walked into the bedroom a unicorn. [outside verbals] (ibid.)
- (40) (a) \*There swam someone carrying a harpoon towards me. [inside verbals]

(Lumsden 1988: 39)

(b) There swam towards me someone carrying a harpoon. [outside verbals] (ibid.: 38)

As can be seen from the examples (e.g. (36a–c) and (37a–c)), the verb *become* can be found in both the inside verbal and the outside verbal. In particular, most of the examples of *there* sentences with *become* in the corpora are categorized as inside verbal, which has a very interesting implication for the lexical property of the verb *become*, which is not an existence or appearance verb per se.

## 3.5 There sentences with become in the interrogative form

This section investigates the syntactic behavior of *there* sentences with *become*, focusing especially on the use of the interrogative form. A large number of previous studies (Aissen 1975; Hannay 1985; Newmeyer 1987; Pérez-Guerra 1999) have demonstrated that *there* constructions with non-be verbs are much more severely constrained in syntactic distribution than *there* constructions with *be*-verbs. Moreover, studies such as Ross

<sup>&</sup>lt;sup>12</sup> Interestingly, the verb become cannot be used in locative inversion constructions, the pragmatic function of which is very similar to that of there constructions in that both constructions introduce a new piece of information into discourse. It is not clear as to why such examples are unacceptable. This article leaves this issue for future study.

<sup>(</sup>i) \*In their relationship became a tension that wouldn't go away. (constructed)

Levin & Rappaport Hovav (1995: 285–6) list 253 intransitive verbs occurring in locative inversion constructions found in the corpus they used, but there is no mention of *become* among them. As they note, their list is not completely exhaustive of all verbs, but it does suggest that examples of *become* are not easy to find.

<sup>&</sup>lt;sup>14</sup> See Kuno & Takami (2004) for a counterargument against Milsark (1979).

(1974), Lakoff (1987) and Yaguchi (2017) have revealed the gradient nature of *there* constructions with non-be verbs in terms of the availability of syntactic patterns; *there* constructions show a prototype structure radiating from *there* constructions with existence verbs to those with manner-of-motion verbs. According to Yaguchi (2017: 140):

The more similar meaning to *be* a verb expresses in a context, the wider syntactic variation of *there* as a subject is available; by contrast, when the verb expresses a physical situation or motion of the referent (i.e., conceptualization of unaccusative verbs), it exhibits less flexibility in syntactic variation.

For example, consider the interrogative sentences in (41a–c):

- (41) (a) Do you remember? Did there hang on the wall a Mexican serape? (Bresnan 1994: 109)
  - (b) Did there occur a sudden revolution . . .? (Quirk et al. 1985: 1408)
  - (c) \*Did there walk into the room a man with a long blond hair? (Rochemont & Culicover 1990: 132)

Examples (41a-b) with existence or appearance verbs are acceptable, while example (41c) with a manner of motion verb is disallowed.

Based on these findings, let us discuss the syntactic behavior of *there* sentences with *become*. This section only focuses on the interrogative form because this sentence type is well attested in natural data. As we can see from (42a–b) and (43a–b), *there* sentences with *become* could be used in the interrogative form, implying that the verb *become* in *there* constructions denotes the appearance/occurrence of a postverbal noun.

- (42) (a) But will there become a point when he begins to feel the heat? (NOW: GB (12–11–24))
  - (b) And will there become a time when you will cease making fun? (TV: 2015)
- (43) (a) <u>Does there become</u> a ripple effect when one part of the industry collapses like this? (WB: spoken)
  - (b) <u>Does there become</u> a real gray area between those who are involved in pre-interrogations and interrogations when, you know, the army manual field book or even Geneva Conventions say there are certain behaviors allowed during interrogation. (COCA: SPOK)

Moreover, *there* sentences with *become* can be embedded in indirect questions headed by *whether* and *if*.<sup>15</sup>

(COCA: MAG)

Some previous studies (e.g. Ross 1974: 575; Aissen 1975: 6; Szekely 2015: 127) insist that there sentences with non-be verbs cannot be embedded in the whether/if clause, as in (i). However, this restriction is too strong because we can find there sentences with non-be verbs occurring in the whether/if clause, as in (ii).

<sup>(</sup>i) \*The reporter wants to know whether there stands in his garden a fig tree. (Aissen 1975: 6)

 $<sup>(</sup>ii) \ \ I \ asked \ him \ \underline{whether} \ there \ existed \ in \ his \ mind \ a \ bright \ line \ that \ separates \ anti-Zionism \ from \ anti-Semitism.$ 

- (44) (a) WA's chief health officer Andrew Robertson has powers under the WA Health Act to close schools or curtail mass gatherings, but earlier on Friday he said future plans depended on how the disease developed and whether there became a need to address a specific town or region. (NOW: AU (20–03–07))
  - (b) Meanwhile, the Saskatchewan government is going to wait and see <u>if there becomes</u> a need for more addictions supports [sic] after marijuana legalization. (NOW: CA (18–10–15))

Thus, *there* sentences with *become* could be used in a wide syntactic context. This means that *there* sentences with *become* denote the appearance/occurrence of a referent of the subject noun.

#### 4 Conclusion

This study has discussed the semantic and syntactic properties of *there* sentences with the verb *become*. It has claimed based on a detailed examination of actual data in corpora that *there* sentences with *become* express the appearance/occurrence of an entity. Although the postverbal noun is structurally a subject in *there* constructions and the subject of the verb *become* is usually interpreted as an entity undergoing a change, the postverbal noun of *there* sentences with *become* is an entity that has arisen as a result of the changing event. The change could be reinterpreted as the emergence of something new, and in particular, it seems to represent emergence (especially 'occurrence') as the speaker subjectively focuses on only the resulting entity in the changing event. Thus, it fits well with the construction's function of introducing new information and is acceptable as an example of *there* constructions. In other words, the 'emergence' meaning of *become* is considered caused (or coerced) by its use in *there* constructions.

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