The Frequency and Use of Communicative Verbs *Show, Speak, Talk & Argue* Within Adverbial Clauses in Written and Spoken Discourse

Božana Tomić  
PhD, Assist. Prof., Faculty of Philology, Slobomir P University

Abstract  
The focus of this paper is on usage of communicative verbs show, speak, talk and argue within adverbial clauses. Since adverbial clauses are used to realize time, manner and contingency semantic categories, the main goal of this paper is to illustrate the use of adverbial clauses that have communicative verbs show, speak, talk, and argue as verbals. The aim is to analyze the frequency and distribution of the verbs show, speak, talk and argue in all types of adverbial clauses. We will also present similarities and dissimilarities of their use in the specific adverbial clauses, and show the specific features of their use within each type of adverbial clause. We will also determine the most frequent type of adverbial clause in each register. The goal is also to present certain features of the selected verbs along with their practical use in spoken and written language. Except that, we will also determine the most frequently used subordinators that introduce all types of adverbial clauses, their use and distribution across analyzed corpus.

**Keywords:** communicative verbs, adverbial clauses, distribution, frequency, subordinators

1. Introduction  
Carter (2005) states that adverbial clauses act as modifiers in or of the main clause (p. 560). They specify circumstances such as manner, time, frequency, place, degree, reason, cause, and condition. In Longman’s terms (1999), adverbial clauses, both finite and non-finite, are used to realize time, place, manner, and contingency semantic categories (p. 818).

Quirk (1985) states that adverbial clauses function mainly as adjuncts and disjuncts (p. 1068). Furthermore, he says that in their potentiality for greater explicitness, they are more often like prepositional phrases (Quirk, 1985, p.1048).
Đorđević (2007) divides adverbial clauses into clauses of manner, clauses of place, clauses of time, clauses of contingency, clauses of degree, clauses of condition, clauses of concession, reason clauses, clauses of purpose, clauses of result, clauses of comparison and similarity, clauses of exception, clauses of proportion, clauses of contrast, clauses of preference and comment clauses (p. 730).

Given that semantic analysis of adverbial clauses is complicated by the fact that many subordinators introduce clauses with different meanings, we will analyze each type of adverbial clause in context, and present results according to the primary meaning of their subordinator in context.

As we already stated, communicative verbs show, speak, talk and argue within adverbial clauses are the subject of this research, the analysis itself is related to the frequency, use and distribution of these verbs within each type of adverbial clauses.

2. Methodology

The corpus used for this research consists of 800 000 000 words and is made of three registers. The analyzed corpus is made of newspaper columns of The Guardian (politics, economy, culture, technology, sports and COVID-19) analyzed during the period 2017-2021, as well as the selections of texts from American and British novels, and, transcriptions of speech of various celebrities from the film industry, political scene and sports (2015-2019) taken from the official BBC website. Each one of the above-mentioned corpuses contains 1 million words. During the analysis, we combined qualitative, quantitative, and comparative methods. Qualitative and quantitative methods provide results regarding the frequency of the use of adverbial clauses and their subordinators, while the qualitative method enables us to emphasize the characteristics of each verb used in a specific type of adverbial clause, as well as all the differences and similarities between analyzed register, and their syntactic features.

3. Results and Discussion

Adverbial clauses are not frequently used in the analyzed written and spoken discourse. More precisely, 888 examples of adverbial clauses are registered in our material, which takes up only 0.01 of the total word count (8 million words). Table 1 presents the total frequency of each subclass of adverbial clauses in written and spoken discourse. Based on the Table 1, time clauses are most frequently used with 449 examples found. Reason clauses (98) and conditional clauses (86) are almost equally used in our material. Concessive (66), clauses of place (56), and manner clauses (32) are less frequent.
Table 1: Frequency of adverbial clauses in written and spoken discourse

Clauses of contrast (20), comment (16), clauses of purpose (13) and clauses of similarity & comparison occur almost equally, while clauses of preference (7), proportion (4), exception (2) and degree clauses (1) are rare. Clauses of contingency are not found in our corpus.

When it comes to different registers, the use of adverbial clauses varies, as shown below.

Table 2: Frequency of adverbial clauses across corpus

Adverbial clauses are almost equally used in the texts on culture and technology, followed by short stories, speech and COVID-19. They are less frequent in politics,
economy, and sport. The use of time clauses is the most dominant in short stories (75), while they are almost equally used in other corpora. Reason clauses are dominant in speech (28), almost equally represented in economy, technology, COVID-19 and politics, while they are rare in other corpora. Conditional clauses are the most frequent in COVID-19, and they are almost equally used in other corpora. Clauses of place are most frequently used in culture, followed by technology; they are less frequent in other corpora while they are not used in COVID-19. The rest of adverbial clauses occur almost equally in all registers. What is common for all analyzed verbs is that neither of them is used within clauses of contingency.

As for individual communicative verbs that are the subject of our analysis, most frequently used verb is the verb show with 307 examples, followed by the verbs talk (284) and speak (237), while the verb argue (60) is less frequent.

Based on the results presented in Table 4, the verb show is most frequently used in time clauses (127), and the greatest number of examples is registered in COVID-19 (27) and economy (24), less is other corpora, while it is rare in speech (6). Conditional clauses are less frequent (48), and occur most frequently is COVID-19 (16). Reason clauses (37) are the most dominant in economy, rare in other corpora, and they are not used in short stories. Concessive (26) and manner clauses (26) are equally represented. While concessive clauses are the most frequent in economy, manner clauses are dominant in culture. It is common for both of these clauses that they are not used in speech.

<table>
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Table 4: Frequency of the verb show within adverbial clauses across corpus

Other clauses are rare. The verb show does not occur in clauses of contingency, degree, exception, proportion and comment clauses.
The verb *talk* is less used within adverbial clauses in the analyzed corpus. As seen from Table 5, this verb is most frequently used within time clauses (162), and they are most dominant in speech, followed by short stories. Time clauses occur almost equally in culture and politics, while they are not frequent in other corpora.

Reason clauses are less frequent with 40 examples found, and most of them are registered in speech, while they are not used in economy. Clauses of place (23) are the most frequent in culture and technology, while they don’t occur in the texts on COVID-19.

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Table 5: Frequency of the verb *talk* within adverbial clauses across corpus

Conditional (18) and concessive clauses (12) don’t occur frequently, and while conditional clauses are almost equally used in all registers, concessive clauses don’t occur in technology and speech. The rest of adverbial clauses are not frequent, while clauses of contingency and degree clauses don’t combine with the verb *talk*.

Based on the results in Table 6, the verb *speak* is also dominant within time clauses (137), and the greatest number of examples is found in sport, less in short stories and technology, while they are not frequently used in other corpora.

Reason clauses are less frequent (19), and while they are not dominant in other corpora, not even one example of reason clauses is found in COVID-19.
Table 6: Frequency of the verb *speak* within adverbial clauses across corpus

Clauses of place and concessive clauses are equally used with 17 examples respectively, and while clauses of place are not used in speech and COVID-19, concessive don’t occur in speech and economy. Conditional clauses (16) are dominant in culture, while they are not used in technology. Other adverbial clauses are not frequent.

Comparing to the first 3 verbs, the verb *argue* is rarely used with only 60 examples found. As shown in Table 7, this verb is most frequently used within time clauses (23). Time clauses are equally used in economy and COVID-19, while the verb *argue* doesn’t occur within time clauses in culture and speech.

Table 7: Frequency of the verb *argue* within adverbial clauses across corpus
Concessive clauses are dominant in economy, while they don’t occur in short stories and speech. Out of 10 examples of comment clauses found, 7 occur in COVID-19 and 3 in politics.

The rest of adverbial clauses are not frequent. The verb *argue* doesn’t occur within manner, clauses of contingency, degree clauses, purpose, exception, proportion and clauses of preference.

As we already mention, **Time clauses** are widely used in our corpus. These clauses combine with our verbs in 449 examples, and as it can be seen from Table 8, they most frequently occur with the verb *talk* (162), followed by verbs *speak* (137) and *show* (127), while they are not frequent with the verb *argue* (23).

<table>
<thead>
<tr>
<th>Time Clauses</th>
<th>talk</th>
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<th>show</th>
<th>argue</th>
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<td>COVID-19</td>
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<td><strong>TOTAL</strong></td>
<td>162</td>
<td>137</td>
<td>127</td>
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Table 8: Frequency of communicative verbs *talk, speak, show & argue* within time clauses across corpus

The clauses are the most frequent in speech with the verb *talk*, followed by the corpus of sport with the verb *speak*; while they are not used in culture and speech with the verb *argue*.

The commonest subordinator that introduces time clauses is the subordinator *when* (see the Table 9 below) with all verbs and 258 examples found. This subordinator is most frequently combined with the verb *talk* (115) in speech (38), followed by culture (19), short stories (19), and politics (17).
Table 9: Frequency of time subordinators

In the corpus with the verb *speak*, this subordinator is most frequent in sport (23) and short stories (20), while it is less used in other corpora.

With the verb *show*, this subordinator is most frequent in culture (19), while with the verb *argue* it is mostly used in economy (5), and it doesn't occur in speech, sport and culture.

The subordinator *after* occurs 76 times, and it is most frequent with the verb *show* (46), almost equally presented as the subordinator *when*. The greatest number of examples with the verb *show* is found in COVID-19 (19) and economy (12). This subordinator combines 18 times with the verb *speak* (mostly in sport and culture), while it is equally used with verbs *talk* and *argue* (6 times respectively).

The subordinator *as* occurs frequently with the verb *speak* (18), followed by the verb *talk* (13). This subordinator rarely combines with verbs *show* and *argue*.

The subordinator *while* is not frequently used and occurs 9 times with the verbs *talk* and *speak*, respectively, 3 times with the verbs *show* and *argue*, respectively. The conjunction *before* combines only with the verbs *show* (12), *talk* (7) and *speak* (6) and the subordinator *since* occurs with the same verbs: *show* (3), *talk* (3) and *speak* (1).

Subordinators *until, once and as long as* combine only with the verbs *show* and *talk*, while, on the other hand, subordinators *as soon as* and *whenever* occur only with verbs *speak* and *talk*. The subordinator *till* occurs only with the verb *show*.

As already stated, the verb *talk* is used in time clauses mainly in speech. The most numerous subordinator that introduces time clauses with this verb is the subordinator *when*. Interestingly, in the corpus of speech, in almost all examples found, the verb *talk* occurs twice in complex sentences, although we found that the verb *talk* also occurs twice within the same time clause:
Does your desire to fictionalize those stories you registered in your new novel, The Merry-Co-Round, have any bearing on a notion of Betty’s in Davies: “She had often thought that when he was talking about himself he was talking about her too”?

When used with the subordinator when, the verb talk occurs with pseudo-intransitive complementation and the preposition about, which functions as a verb complement in the language of speech and culture. As for other prepositions performing the same function, only a few examples of the preposition to are found in both corpora:

“But when there’s something else to talk about, and there’s something that’s connecting people right in front of him, then that really really helps.”

On the other hand, in short stories the preposition to performs the function of prepositional complement in almost all examples found, while the preposition about is rare:

‘She gave it to me.’ Ellie never called Magda by her name when talking to Robert; she didn’t have to.

Unlike the verb talk, the verb speak occurs with more diverse prepositional complements—in the clauses introduced by subordinator when. A variety of prepositions such as to, of, with, on and about are registered in the corpus of short stories:

And when you spoke of Seaford in that lingering way, how happy you had been there with that dippy potter woman, I thought that would be clean at least.

In speech, the verb speak occurs with the complementation speak + to + NP + about + NP (a), while in culture this verb is used with the complementation speak + NP + to + NP (b):

a) When I speak to her about it, she so, so wants it to happen.

b) It starts in 1963 with the March on Washington when King spoke immortal words to more that 200,000 people from the steps of the Lincoln Monument.

In the language of sport, within time clauses introduced by the subordinator when the verb speak often occurs in the form of gerund:

Yet, when speaking to the 39-year-old Englishman about an Open appearance in his home country, his excitement is palpable.

The verb show less frequently combines with the subordinator when. In the language of short stories, technology and COVID-19, the verb show occurs in non-finite forms. While in short stories and technology, this verb is used in the form of to-infinitive (a), in the corpus of COVID-19, it occurs in the form of gerund (b):

a) It seemed she was as aware of him as I was: she put her arm around my shoulders and talked in the loud and lively way people do when they want to show others that they are having a good time.
b) Yet still key workers can’t get tested – even when they start showing symptoms – to confirm whether they pose a risk, either to those they help or to their own families.

Although, the verb *argue* is not frequently used, it is still possible to emphasize certain characteristics of its use within time clauses with the subordinator *when*. In almost all examples in economy, adverbial clauses of time with the subordinator *when* are combined with nominal *that*-clauses (a), except in one example where instead of subordinate *that*-clause, it occurs the combination with non-personal subject (Quirk, 1985, p. 214) (b):

a) Chadha says the Bank is manufacturing its own vicious circle when it argues that weak growth must lead to low interest rates for longer.

b) Soriot was on firmer ground when he argued there’s more to AstraZeneca’s pipeline and new products than just Mystic.

Also, in the corpus of economy, *when* imply repetitiveness, and it is synonymous with *whenever* (Quirk, 1985, p. 1083):

*It can also be seen when wealthy pensioners argue that the government should maintain the state pension as a universal benefit and even continue paying the winter fuel allowance.*

Although the subordinator *after* is less frequent, this subordinator in the corpora with the verb *show* is almost equally represented as the subordinator *when*, and the greatest number of examples is registered in COVID-19 (19) and economy (12). In the majority of examples in the corpus of COVID-19, the verb *show* occurs in non-finite form, i.e. the form of gerund (a), while in all examples in economy, it is used in finite form, usually in the past simple tense (b):

a) About a week after the cat’s owner started showing symptoms, the cat also developed breathing difficulties, diarrhoea and vomiting, and subsequent tests by vets at the University of Liège showed the animal was infected with coronavirus.

b) Oil prices gyrated earlier in the day after US government data showed a surprise drop in domestic crude stockpiles for a fourth week in a row.

In politics and sport, the verb *show* combines with the catenative construction with *appear to*:

a) Labour has demanded answers from the government after leaked letters appeared to show ministers were repeatedly warned that fire regulations were not keeping people safe in high rise blocks like Grenfell Tower.

This subordinator is less frequently used with the verb *speak* (18), and it is found in sport (4) and culture (4). In sport, the verb *speak* occurs within multi-word construction, i.e. in the form of the phrasal verb *speak out*, and in the same corpus, this phrasal verb is combined with the preposition *against*:
Varnish claimed she was dismissed after speaking out against coaching decisions but the report stops short of this conclusion.

The verb *talk*, in almost all examples found, occurs in non-finite form, more precisely, in the form of gerund, while in this combination, the preposition *to* usually performs the function of the prepositional complement:

“After talking to the Arts Council and lawyers,” says Biscuit, “it turned out that we wouldn’t legally be allowed to use a funding grant in that way.

Time clauses introduced by the subordinator *after* and with the verb *argue*, in the texts on COVID-19 and sport usually occurs in non-finite form. Thus, in the corpus of COVID-19, this verb is used in the form of *to*-infinitive (a) and gerund (b), while in sport it only occurs in the form of gerund (c):

a) And some commentators are already lining up to argue that after this, the climate crisis will be pushed aside and business will have a clearer case against government regulation.

b) Julian Assange was denied bail after arguing he is at risk of contracting the virus in the British prison where he is being held.

c) Docked a point after arguing with Alves, he called for the supervisor.

The rest of the subordinators found is less frequent, while subordinators *directly, immediately, now (that), so long as, whilst* are not registered in the analyzed material.

**Reason clauses** are less frequent (98 examples), and most of the examples are found with the verb *talk*, followed by the verb *show*. Table 10 presents that these clauses are not frequently used with the verb *speak*, and that they occur in only two examples with the verb *argue*.

<table>
<thead>
<tr>
<th>Reason Clauses</th>
<th>talk</th>
<th>show</th>
<th>speak</th>
<th>argue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td>-</td>
<td>12</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Culture</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Politics</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Sport</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Technology</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Short Stories</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Speech</td>
<td>21</td>
<td>2</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>COVID-19</td>
<td>5</td>
<td>7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>40</strong></td>
<td><strong>37</strong></td>
<td><strong>19</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Table 10: Frequency of communicative verbs *talk, speak, show & argue* within reason clauses across corpus

The most frequent use of these clauses is found in speech with the verb *talk*, less in all other corpora, while they are not used in economy with the verbs *talk* and *argue*, short stories with the verbs *show* and *argue*, COVID-19 with the verbs *speak* and *argue*, and culture with the verb *argue.*
As for subordinators introducing reason clauses, the most frequent one is the subordinator because (68), less used is the subordinator as (28), and there are only one examples of subordinators now (that) and since found, respectively. As seen from Table 11, there is a difference in the most frequent subordinators used with different verbs.

Thus, the subordinator because is more frequently used with the verbs talk and speak, while it is not used with the verb argue, and the subordinator as is more frequent with the verb show.

<table>
<thead>
<tr>
<th>Reason Clauses Subordinators</th>
<th>talk</th>
<th>show</th>
<th>speak</th>
<th>argue</th>
</tr>
</thead>
<tbody>
<tr>
<td>because</td>
<td>36</td>
<td>15</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>as</td>
<td>2</td>
<td>22</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>since</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>now (that)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 11: Frequency of reason clauses subordinators

In speech, the verb talk (20) is chiefly found in the clauses introduced by the subordinator because. In other texts it is less used with the same verb, for example it is not used in short stories. In speech, the verb talk almost always occurs with the preposition about, that performs the function of the prepositional complement, while the preposition to, performing the same function, is found in only 2 examples:

JEFFREY BROWN: I'm curious now, because you were talking about short stories, and one thing I didn't know about you — I know your novels, but I didn't, until I was just reading about this prize, you wrote crime fiction under a pseudonym?

In addition, in the same corpus, the verb talk occuring with the complementation talk + about + NP is premodified with the adjunct of universal frequency always, adjunct of high frequency often, adjunct of low frequency never, and exclusive subjunct just:

I now know something I never knew because it was never talked about, that on the eve of my third birthday, she was in a psychiatric institution having electroshock treatment.

In the corpus with the verb speak, this subordinator mostly occurs in speech (5), while in COVID-19 is not used at all. Like the verb talk, the verb speak is mainly used with the complementation speak + to + NP, where the verb speak is premodified with the time-relationship subjunct still:

Most classics are classics for a reason, because they contain stories that still speak to us, stories that endure.

In the corpus with the verb show, this subordinator is mostly used in technology, and it usually occurs in the complementation with the that-clause, that performs the function of a direct object:
Testing without drivers is also critical because studies have shown that in partial automation, where a human is still behind the wheel, it can be difficult for a driver to stay engaged.

The subordinator as is most frequent in the corpus with the verb show, and it is mostly used in economy (12), less in COVID-19 (5), while it is not used in speech, sport and short stories. In economy, this verb often occurs with the complementation show + that-clause (a). The complementation show + NP is less frequent (b):

The ratings agency said there were signs of “renewed tremors” from the result of the UK’s EU referendum on 23 June while the election of Trump as US president showed that political risk remained significant.

The government’s spending deficit is on course to worsen this year as official figures show the economic slowdown is beginning to take a toll on the UK’s public finances.

Within these clauses introduced by the subordinator as, the verb show occurs with the complementation show + wh-clause in the COVID-19:

“I was expecting to hear back but I heard that the government has been inundated with volunteers which is great news as it shows what we can do as a country when we come together.”

Subordinators since and now (that) are represented with only one example respectively, and occur in economy (since) and politics (now (that), while subordinators in view of the fact that and seeing (that) don't occur with our verbs.

There are 86 examples of Clauses of condition in our corpus, and the verb show is mostly used within them (48). Verbs talk and speak are less used within these clauses, while only a few examples of verb argue are found within these clauses. As represented in Table 12, the most frequent use of these clauses is found with the verb show in COVID-19, while it is less used with other verbs.

Conditional Clauses are not found in short stories with the verb speak, and in most of the corpus with the verb argue. As the analysis has shown, the function of conditional clauses perform conditionals. The most frequent type of conditional is open condition (53), hypothetical condition is less frequent (21), while the indirect conditional is only found in technology with the verb show. One example of mixed conditional is also found in economy with the verb speak.
Table 12: Frequency of communicative verbs *talk, speak, show & argue* within conditional clauses across corpus

The verb *show* appears in open conditional 28 times, with the greatest number of examples in in the texts on COVID-19 (5), and none in culture. Less frequently, *talk* occurs with this conditional (12), and it is almost equally used in all corpora. The same number of examples is found with the verb *speak* (12), where it is not used in sport and short stories. In the corpus with the verb *argue*, the open conditional is only found in speech and politics. Hypothetical condition is less frequent and it occurs rarely in all corpora with the verb *show* except in speech, culture and politics with the verb *talk*. In the corpus with the verb *show*, this conditional occurs only in sport and speech, while it is found only in speech and politics with the verb *argue*.

The only subordinators introducing conditional clauses are subordinators *unless* and *given*. The subordinator *unless* occurs in all corpora with the verb *show* except in short stories, and only one example of this subordinator is found in speech with the verb *talk*. In the conditional clause with the subordinator *unless* in technology, the verb *show* combines with the central modal verb *could*:

*When Pistorius first applied to run in the Olympics, IAAF rules said that runners using prosthetics would be allowed to compete against able-bodied athletes unless the IAAF could show that the athlete received an unfair advantage over other athletes not using prosthetics.*

The subordinator *given* is registered in only 2 examples in economy with the verb *show*:

*That was a hypothetical example, obviously, given that data from Money facts shows a third of savings accounts now earn less than the 0.25% base rate. Even so, Haldane should keep banging on about numeracy.*

Subordinators *as long as, assuming (that), if only, in case, in the event (that), just so (that), on condition (that), providing/provided (that), so long as and suppose/supposing (that)* are not found in the analyzed material.
Clauses of concession, with 66 examples found, are also not frequent in the analyzed corpus. As it can be seen from Table 13, verb *show* usually occurs within this type of clauses (26), and the other verbs less.

<table>
<thead>
<tr>
<th>Clauses of Concession</th>
<th>show</th>
<th>talk</th>
<th>speak</th>
<th>argue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td>7</td>
<td>1</td>
<td>/</td>
<td>3</td>
</tr>
<tr>
<td>Culture</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Politics</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Sport</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Technology</td>
<td>2</td>
<td>/</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Short Stories</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>/</td>
</tr>
<tr>
<td>Speech</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>COVID-19</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>26</strong></td>
<td><strong>12</strong></td>
<td><strong>17</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

Table 13: Frequency of communicative verbs *talk, speak, show & argue* within conditional clauses across corpus

The most dominant use of these clauses is registered in economy with the verb *show* as their verbal, less in other corpora, while it is not used in speech with neither of our verbs. The list of subordinators introducing clauses of concession is given below.

<table>
<thead>
<tr>
<th>Concessive Subordinators</th>
<th>show</th>
<th>talk</th>
<th>speak</th>
<th>argue</th>
</tr>
</thead>
<tbody>
<tr>
<td>although</td>
<td>14</td>
<td>3</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>while</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>even if</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>/</td>
</tr>
<tr>
<td>even though</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>/</td>
</tr>
<tr>
<td>whereas</td>
<td>/</td>
<td>1</td>
<td>/</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 14: Frequency of concessive subordinators

The most frequent subordinator is *although* (29), followed by the subordinator *while*, and subordinators *even though* (8), *even if* (7) and *whereas* (2) are less frequent. The verb *show* occurs in clauses introduced by subordinator *although* usually in sport (5), where the verb *show* is combined with the catenative construction *appear to*:

*After their attack, Dumoulin called the Colombian and the Italian out for what he viewed as underhand conduct, although television images appeared to show Quintana and Nibali waiting initially as the race leader chased, fruitlessly.*

In short stories, the verb *speak* is premodified with the adjunct of low frequency *never* and manner adjunct *directly*. As for other adverbials, in the same corpus, we registered manner adjunct *proudly* and time-relationship subjunct *yet*:

*And although they never spoke directly to each other, Charlie kept joining in the conversation in an odd, once-removed manner.*
When these clauses are introduced by the subordinator *while*, then the verb in the clause is *argue*, usually in technology (3) and COVID-19 (3). Within concessive clauses, the verb *argue* is often combined with central modals. In politics, this verb is combined with the central modal *might*, while in technology, it occurs with the central modal *could*, and in technology, it is used with the modal *can*:

*a) While some might argue that it’s what a person says that counts, they might change their minds when MPs start rocking up for government votes in beach shorts, with a skateboard tucked under their arm, to go down to the park later.*

Other subordinators are not frequent, while subordinators *if* and *whilst* are not registered in our corpus.

**Clauses of place** are not frequent in our corpus (56). As a verbal, the verb *talk* occurs in 23 examples of these clauses, verb *speak* in 17, verb *show* in 13, and verb *argue* only in 3 (Table 15).

<table>
<thead>
<tr>
<th>Clauses of Place</th>
<th><em>talk</em></th>
<th><em>speak</em></th>
<th><em>show</em></th>
<th><em>argue</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td>2</td>
<td>1</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Culture</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Politics</td>
<td>2</td>
<td>5</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Sport</td>
<td>2</td>
<td>2</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Technology</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Short Stories</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>/</td>
</tr>
<tr>
<td>Speech</td>
<td>4</td>
<td>/</td>
<td>1</td>
<td>/</td>
</tr>
<tr>
<td>COVID-19</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>23</strong></td>
<td><strong>17</strong></td>
<td><strong>13</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

Table 15: Frequency of communicative verbs *talk, speak, show & argue* within clauses of place across corpus

The most frequent use of these clauses is registered in culture and technology with the verb *talk* and culture with the verb *show* (6 examples in each). Interestingly, like concessive clauses, clauses of place are not used in speech with any of the analyzed verbs.

The only subordinator introducing clauses of place is the subordinator *where*. In all examples, the verb *talk* occur with pseudo-intransitive complementation *talk + PP*. The most frequent preposition that has the function of prepositional complement is the preposition *about* (13). The preposition *to* is less frequent (7). Prepositions that also perform the function of prepositional complement in the corpus with the verb *talk* are *with & into* (economy), *off & of* (technology):

*The fear stems from a passage in the Bible’s book of Revelation, where it talks of the mark of the beast on the forehead or right hand.*
The subordinator *wherever* is not registered in our corpus.

Verb *show* occurs in **Manner clauses** 26 times, while verbs *speak* and *talk* occur 3 times each. The verb *argue* does not occur within these clauses.

With the verbs *show*, these clauses are most frequent in culture (8), while they are not used in speech. With the verb *talk*, manner clauses occur with one example in short stories, speech and economy, while with the verb *speak* are used only in short stories (3).

The most frequent subordinator is the subordinator *as* (23), and all examples found are used with the verb *show*. These clauses are most frequently used in culture (6), and less in other corpora. In culture, the verb *show* occurs with the complementation *show* + NP + *wh*-clause:

> “Do you know what we used to do?” is the motif, as Bishop shows us how he first chatted up his wife, or (good routine, this one) how hard it used to be to start a car.

The subordinator *as if* occurs in culture (2) and short stories (1) with the verb *show*, short stories (1) and economy (1) with the verb *talk*, and in short stories with the verb *speak* (3). The subordinator *as though* occurs only in speech with the verb *talk* as verbal.

**Clauses of result** are not used frequently, and out of 25 examples registered, 11 is found in the corpus with the verb *show*, 8 with the verb *talk*, 4 with the verb *speak*, and only 2 examples with the verb *argue*. In the corpora with the verb *show*, 3 examples are found in speech, 2 in short stories and sport, respectively, and one example in the corpus economy, politics, technology and COVID-19, while they are not used in culture. In the corpus of speech, the verb *show* occurs in the form of *to*-infinitive, and has the function of adjective complementation:

> Sometimes you have different challenges, so it’s nice to show different sides and show different parts of your game.

In the corpus with the verb *talk*, clauses of result are used in speech (2), COVID-19 (2), and only one example in short stories, sport, technology and culture respectively, while it is not used in economy and politics. In the corpus with the verb *speak*, these clauses are used only in technology (2), sport (1), and short stories (1).

The most frequent subordinator is the subordinator *so* (23), the subordinator *so (that)* is found only in technology (1) and short stories (1) with the verb *speak*, while the subordinator *such (that)* is not found in the analyzed material.

**Clauses of contrast** are also not frequent. Out of 20 examples found, 8 is registered with the verb *show*, 6 with the verb *speak*, 4 with the verb *argue*, and 2 with the verb *talk*. In the corpus with the verb *show*, these clauses occur in culture (2), and all the other corpora with one example respectively, except in speech where clauses of contrast are not used. In the corpus with the verb *speak*, these clauses are found in
economy (2), and technology (2). With the verb *argue*, clauses of contrast are used in COVID-19 (2), economy (1), and politics (1), while with the verb *talk*, we found in politics (1) and economy (1).

In our corpus, these clauses are mainly introduced by the subordinator *while* (19), while the subordinator *whilst* is found only in shorts stories (1) with the verb *show*. In culture, the verb *show* occurs with the complementation *show + NP* as direct object, where the NP consists of coordinated complex noun phrases:

*One stand interprets “digital traces” in the city, like text messages and phone calls, in the form of abstract sounds, while another shows footage of flashmobs and protests in the Arab spring, both apparently the product of the internet and public space.*

The subordinator *whereas* doesn't occur in our corpus.

**Comment clauses** are found with the verb *argue* (10), *speak* (4), and the verb *talk* (1). In the corpus with the verb *argue*, these clauses are found in COVID-19 (7) and politics (3), with the verb *speak* in culture (4) and COVID-19 (1), and with the verb *talk* in the corpus of speech. Interestingly, almost all examples found with the verb *argue* occur in the final position, except 2 examples that are used in the medial position. All examples of these clauses with the verb *speak* occur within the phrases *so to speak*, while the only one example in the speech with the verb *talk* is used in the medial position:

*She said, ‘I completely respect the mandate Jeremy has for the membership,’ as you’ve been talking about, ‘but in 7 Andrew Marr Show, 10th July, 2016 – JEREMY CORBYN I/V order to lead Labour in Westminster he has to have a parliamentary mandate too,’ and you don’t.*

**Clauses of purpose** are found in the corpus with the verb *talk* (technology-2, COVID-19-2, short stories-1), the verbs *speak* (COVID-19-3, technology-1) and *show* (short stories-3, culture-1). The most dominant subordinator introducing these clauses is the subordinator *so that* (7), while subordinators *so* (3 in COVID-19 with the verb *speak* and 2 in technology and COVID-19 with the verb *talk*) are less frequent, and the subordinator *in order so* occurs only in technology (1) with the verb *talk*:

*Launched way back in 2000, a naive age when people bought mobile phones in order to talk to each other, the handset is still famed for its lengthy battery life, structural solidity and Snake II.*

**Clauses of Comparison and Similarity** occur with the verb *speak* (technology-2, sport-1, short stories-1, economy-1), the verb *show* (culture-1, politics-1, short stories-1, sport-1), the verb *talk* (sport-2, technology-1), and the verb *argue* (technology-1). The most frequent subordinator is subordinator *as well as* (technology with the verb *argue*, technology with the verb *talk*, technology with the verb *speak*, culture, politics and short stories with the verb *show*). In culture with this
subordinator, the verb *show* follows the complementation pattern *show + NP + wh-clause*:

*As well as showing you how to make the tonkotsu ramen that made him famous, it tells you his life story and explains in detail what it’s like to open a restaurant, which I’d love to do myself at some point.*

Subordinators *more than* (4), *as far as* (1), *less than* (1), *as qualified as* (1) are rare, while subordinators *as many as, as much as, fewer than, as good/fit/heavy/large/better/heavier/larger/longer/more fit than, as far as, as long/soon/sooner/further than* are not used in our corpus.

**Clauses of preference** are found in the corpus with the verb *talk* (politics-3), the verb *show* (economy-1, speech-1, technology-1) and only one example is registered in technology with the verb *speak*. The only subordinator that marks clauses of preference is the subordinator *rather than*, while the subordinator *sooner than* is not found. Interestingly, in all 3 examples found in politics, the verb *talk* occurs in the form of gerund:

*Rather than talking about the government’s plans for the economy, he chose to spend his time at the dispatch box telling the Commons why no one should believe a word that was in the Labour manifesto.*

**Clauses of proportion** are found only with the verbs *talk* and *speak*. The verbs *talk* combines with these clauses in the corpus of culture, sport and speech-one example per each corpora. Two examples of clauses of proportion are introduced by the structure *the more...the more* (culture and sport), while one example occurs with the structure *the more...the better* (speech). The verb *speak* occurs once within clauses of proportion in the corpus of culture and this example is introduced by the structure *the more...the more*:

*We are backstage at the Barbican, the London Symphony Orchestra’s home venue, and the more Rattle talks the more it seems clear that he sees “making things better” as not only a possibility but a responsibility.*

**Clauses of exception** are very rare and we found only two examples combining with the verbs *speak* and *talk* respectively. In the corpus of short stories with the verb *speak*, this clause is introduced by the subordinator *except that* and the verb *speak* is in negative form, while in the corpus of speech with the verb *talk*, this clause is marked by the subordinator *but that*.

*Except that this voice was not speaking in Paul’s broken Sahib-Hindi: it was colloquial, racy, freely mixed with Punjabi curse words.*

**Clauses of contingency** are not combined with communicative verbs *show, speak, talk* and *argue* in the analyzed material.
Conclusion

Communication verbs *show, speak, talk* and *argue* are not frequently used within adverbial clauses. In our corpus, we registered 888 examples of adverbial clauses, which takes up only 0.01 of the total word count (8 million words).

As for individual verbs, most frequently used verb is the verb *show* with 307 examples, followed by the verbs *talk* (284) and *speak* (237), while the verb *argue* (60) has the lowest frequency in the analyzed corpus.

Clauses of time represent the most frequent subclass of adverbial clauses, which are frequently used with all four verbs of communication, but they are most dominant with the verb *talk*. The most dominant subordinator introducing these clauses is the subordinator *when*.

Reason clauses also combined with all verbs, but they are most numerous in corpus with the verb *talk*. The most frequent subordinator that is made of these clauses is the subordinator *because*.

Clauses of Condition occur with all verbs, but they are most frequently used with the verb *show*. The most dominant type of conditional is open conditional while hypothetical and indirect conditionals are not frequent.

Clauses of concession are not frequent, and are mostly used with the verb *show*, and less with other verbs. The most dominant subordinator in our corpus is the subordinator *although*.

Analyzed verbs are not frequently used within clauses of place. The greatest number of examples occur with the verb *talk*, and the only subordinator introducing these clauses in our corpus is the subordinator *where*.

Manner clauses are used only with the verbs *show, speak* and *talk*. The most dominant conjunction marking manner clauses is the subordinator *as*.

Although not frequent, all analyzed verbs are registered within clauses of result, while the most frequent subordinator is the subordinator *so*.

Clauses of contrast are also not frequently used with our verbs. In our corpus, these clauses are mainly introduced by the subordinator *while*.

Comment clauses only combine with the verbs *argue, speak* and *talk*, while clauses of purpose only occur with the verbs *talk, speak* and *show*.

Our verbs are not frequently combined with clauses of comparison & similarity, and the most frequent subordinator used is the subordinator *as well as*.

Clauses of preference are found with the verbs *talk, show* and *speak*, while clauses of proportion occur only with the verbs *talk* and *speak*. Similarly, only verbs *speak* and *talk* are registered within clauses of exception.
Clauses of Contigency are not combined with communicative verbs *show, speak, talk* and *argue* in the analyzed material.

Taking into consideration that communicative verbs within adverbial clauses are not extensively examined, we consider that this paper will give a significant contribution to research of other verb classes within adverbial clauses in the English language.

**Literature**


[18] Corpus resources


[33] DC: Shoemaker & Hoard.

[37] https://www.theguardian.com/
[38] https://www.bbc.com/news/live/uk-42116319
[39] http://www.bbc.co.uk/programmes/articles/3hshxFhHM4dKd3px6Q3NzRF transcripts

[41] https://www.rollingstone.com/
[42] https://storgy.com/
[43] https://www.npr.org/sections/music-interviews/
[46] https://charlierose.com/
[47] https://pando.com/