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A CORPUS-DRIVEN ANALYSIS OF *OPEN MOUTH* COLLOCATION: A TYPOLOGICAL PERSPECTIVE

The paper analyzes the whole population of the statistically significant *open mouth* collocation (488 tokens), drawing on theories like Construction Grammar Approach to Argument Structure (Goldberg, Croft), Valency Theory (Herbst and Schüller), Radical Construction Grammar (Croft). An eight-step procedure is used in identifying, categorizing and classifying the language-specific emergent constructions with their construction-specific grammatical categories. They are the primitive units of syntactic representation organized in taxonomies of part-whole inheritance semantic relations. In an attempt at giving an explanation of the collocation-specific constructions and their emergent uses, typology theory and theory of language (Croft) are an integral part of the methodology thus making the description cross-linguistically valid and the description of the morphosyntactic structures comparable not only within but also across languages.

Keywords: collocation, construction grammar approach to argument structure, radical construction grammar, morphosyntax, typology

1. Introduction

Investigating utterances and recurrent patterns of use in their context (KWIC) became possible with the advent of technology and the availability of big corpora. One of the challenges one meets includes not only description of empirical data, identification and classification of structures but most of all explanations of the uses of constructions in the light of typology theory¹. The hypothesis of ‘construction’ being a basic linguistic unit is explored and the emergent constructions focus on issues which have not been addressed before. The main effort is directed at using the appropriate paraphernalia so that it will enable comparability between collocation-specific constructions and the language-specific English constructions.

What is a language? Croft argues that “the proper definition of speech community is a population of individual speakers who are communicatively isolated from other speakers. The communicative interaction of speakers defines another popula-

¹ Typology: an approach to the study of language that starts from the diversity of grammatical structures across the languages of the world, and derives general patterns found in that diversity (Croft 2021: Glossary of terms).

tion: the population of utterances produced by the speakers in a speech community. A language is a population of utterances – not possible utterances, but actual utterances [...]. All of these populations are also spatiotemporally bounded individuals: real, existing, finite, empirical entities” (Croft 2001: 365). Analyzing utterances is a means of sharing experience, a journey through a region of the speaker’s mind. This sharing is achieved through the structures of the utterances, i.e. the constructions and their spatial and temporal characteristics. The keyword along with the verb *open* defines the domain: the specific situations in which people use language to express feelings and information related to the body part *mouth* or make other people do something with it and it is therefore important for the speaker to be understood correctly by the hearer.

The *corpus*, the importance of which cannot be overemphasized, consists of concordance lines of the keyword or lemma *mouth* (488 tokens), drawn from the BNC by the SkE software (Kilgarriff et al. 2004).

Previous Research in The Field

The paper develops the methodology used in Seizova-Nankova (2016a) by integrating the typological argumentation found in *Radical Construction Grammar: Syntactic Theory in Typological Perspective* (Croft 2001), and in his other publications (Croft 2000, 2003, 2012, 2015, 2021). It is our first more serious attempt at looking for and finding cross-linguistically valid explanation of the collocation-specific constructions under discussion using the construction grammar terminology with focus on typology.

Research on statistically significant collocations of body part terms and the constructions based on them has been the focus of attention for some time now. *Lexicogrammar of V_hand(s) Collocations: A Corpus-driven Approach* (Seizova-Nankova 2016a), a stand-alone book, explores for the first time the lexicogrammatical continuum by studying the top twenty-five most frequent V-N/*hand(s)* collocations by giving a detailed morphosyntactic description of emergent language-specific argument structure constructions. It is based on a corpus of 6279 instances of use, drawn from the BNC by the SkE software (Kilgarriff et al. 2004). Motivated by the foreign language learner perspective in mind, the work studies language-in-use in diverse discourse functions touching upon aspects of typology theory and the theory of grammaticalization (Croft 2000, 2003, 2010). That enterprise comes very close to field work, the same problems for the language user and the language learner (Croft 2000, 2001, 2003). *Close eye(s)* (Seizova-Nankova 2016b), and *press mouth V_N* collocations (Seizova-Nankova and Muharem 2017) are other body parts analyzed based on related research (Seizova-Nankova 1996, 1998a, b, 2000, 2001, 2002, 2010, 2019).

More publications on predicative adjective complementation are i) with copula *be* in English and Bulgarian (Doykova 2015, Doykova and Seizova-Nankova 2013, 2015), ii) on predicative adjective ‘sorry’ (Peneva 2013, 2014, 2015), iii) on the English imperative (Ruseva 2017) and specifically on inducement in classroom

language based on BYU-BNC corpus (Seizova-Nankova and Ruseva 2017), iv) on the predicative complementation patterns of the adjective ‘ashamed’, an analysis in the perspective of FLT, based on a reference corpus (drawn from BNC, SkE software) and learner corpus (Dimitrova and Seizova-Nankova 2021), etc.

2. Methods and Methodology

The methodology involves the inductive methods of observing, chunking, and theorizing on the patterns of use by integrating the typological perspective. The distributional analysis, extended to include meaning and the corpus-driven approach are the basis on which generalizations are made about the emergent patterns (Biber et al. 1998, Biber 2009). Other theories include the construction grammar approach to argument structure (Goldberg 1995, 2006, 2013, Croft 2001, 1990/2003, 2021), lexical version of valency theory (VT) (Herbst and Schüller 2008, Herbst, Schmid and Faulhaber 2014), which in combination with construction grammar facilitates valency specifications of structural elements in constructions (Seizova-Nankova 2016b: 24–25). The combination of VT with Construction Grammar, combined with the usage-based model, cognitive linguistics (Croft and Cruse 2004, Ungerer and Schmid 2006, Bybee 2010), and especially the principles and syntactic argumentation of *Explaining Language Change* (Croft 2000), *Radical Construction Grammar* (Croft 2001), *Typology and Universals* (Croft 2003), *Morphosyntax* (Croft 2021) provide a suitable framework for investigating item-specific knowledge and the character of generalization. They form a necessary part of the methodology in order to achieve greater explanatory power and an easily comparable description of morphosyntactic structures.

3. Description of the Corpus Data

An eight-step know-how procedure following Herbst and Schüller (2008) with adaptations to suit the purposes of the research involves: i) *the tag*, a concise meta-data about the corpus showing normalized frequency per million along with information about relative frequency of singular and plural forms of headword: *open_mouth*, hits: 488 (4.4 per million) with sg 469/96% vs. pl 19/4% opens up the analysis; ii) the lexicographical approach, good for comparing the *dictionary definitions* with corpus analysis; iii) the *corpus sample* is of importance in order to familiarize the uninitiated with the lemma *mouth*, its span to left and right of it, the random concordance lines which are then manually classified, the capitalized initials at the front of each line are used for easily accessing the source text; iv) *quantitative valency* helps identify monovalent, divalent, trivalent and quadrivalent uses of active, passive, ergative constructions, v) illustrative *examples* are used as a manifestation of the constructions, vi) the description of the *complement inventory* gives an adequate representation of the paradigmatic structural diversity with complement specification of construction elements at the different positions, vii) the *valency patterns* serve as a manifestation of the syntagmatic order of elements, and viii) last but not least, the *valency constructions* with their form and function specifications (Herbst 1999, 2010, Herbst et al. 2004) of the argument structures

(Goldberg 1995, Croft 2001), revealing the range of encoding markings and behavioral potential of the constructions. In a nutshell, that is the path one should take from tokens, raw data to categorization and classification of the emergent structures but for lack of space only some of these are highlighted. Next step is placing the emergent constructions in the taxonomy network as instances of the prototypical argument structure constructions in English and integrating typological features in the explanation.

3.1. Corpus Sample

J2T	her eggs at birth. Later, she opens her	mouth	and the tiny frogs emerge. During" incubation
J9C	money would just come whenever you open your	mouths	. You are at last realising the folly of
J54	them down again very neatly. He opened his	mouth	but before he could get any words out,
J55	the bass tell us before he has opened his	mouth	that here is a man who will not fit into
JXT	galloping uncontrollably. She opened her	mouth	to speak and found she couldn't. She could
JXT	listen. Her soul was bleeding. She opened her	mouth	to speak, but no sound came out. </p><p>
JXX	him further, but, even as she opened her	mouth	to tell him exactly what she thought of
JXX	<p> And then, just as Laura was opening her	mouth	to explain exactly why motherhood wasn't
JXX	disappeared from sight, Laura was just opening her	mouth	to give vent to her intense anger, when
JXV	Anger roared inside her and she opened her	mouth	to tell him in no uncertain terms where
JXY	he had done in the past. She opened her	mouth	to try to put this fact into words, but
JXY	on the situation. Angrily she opened her	mouth	to protest but at that moment the door
JXY	her hand in protest as Rachel opened her	mouth	` - it just won't wash any more. Everyone
JYB	the wrong place again. Kathleen opened her	mouth	, and a lid drooped over one of those fabulous
JYB	Joe. OK, what next?' </p><p> He opened his	mouth	, shut it again and grinned sheepishly. </p>
JYB	porter grinned and winked and opened his	mouth	. Kath ran before he had time to air his
JYB	sides at once.' </p><p> The man opened his	mouth	to comment, shrugged and went back to the
JY0	doctor had made a misake? She opened her	mouth	to ask her mother why he'd said that, and
JY8	</p><p> 'Every time I think so you open your	mouth	and I'm forced to re-evaluate,' he returned
JY9	touch light. Startled, Ashley opened her	mouth	to protest, but as she did his lips parted

By simply looking at the corpus sample some recurrent patterns already emerge (discussed in detail below).

3.2. Dictionary Definition of *open*, v (OLD online)

mouth [transitive, intransitive] **open (something)** if you **open** your mouth or your mouth **opens**, you move your lips, for example in order to speak. *He hardly ever opens his mouth* (= speaks). *I opened my mouth to call for help*. *Her mouth opened but no sound came out*.

These examples cover only some of the uses² of the collocation. The lexicographical approach can easily be compared with the results from the corpus-driven analysis and the conclusions drawn thereupon.

² *He hardly ever opens his mouth* (= speaks) correspond to the *divalent reflexive* construction; *I opened my mouth to call for help* corresponds to the *divalent reflexive* + [to-INF], and *Her mouth opened but no sound came out* corresponds to the *monovalent ergative* construction. No other types like the *passive*, the *trivalent caused-motion* and the *resultative* constructions are mentioned (Table 1).

3.3. Valency Constructions

Valency constructions combine the particular of the item-specific constructions with the general semantic properties of the argument structure constructions as will be manifested below. Specific participant roles can be combined with more general semantic roles of arguments.

3.3.1. Monovalent Ergative Construction^{3/4} tokens

A6C ... up the girl looked at the audience, her mouth slowly opened and on her face was an expression ...

SCU NP VHC_{act:1}
 [NP_{a_subj} ‘AGENT’]_opened_{act}

Other examples:

FPF Fighting cock, you mean? His strip of mouth opened but his eyes did the laughing.

GV6 ... the glass of the sliding windows and his mouth suddenly opened with surprise.

BPA ... into a menacingly parody of his smile. The mouth slowly opened – and there was a sound like ...

3.3.2. Divalent Reflexive Construction/250 tokens (APP. I.)⁴

(1a.) JY9 Ashley_i obediently opened her_i mouth. “So I’m expected to act as though ...

SCU NP VHC_{act:2} PCU1
 [NP_{act_subj} ‘AGENT’]_opened_{act} [NP ‘AFFECTED’]

JYB ... porter grinned and winked and opened his mouth. Kath ran before he had time to air his ...

³ For the notifications of the mapping between function and form in the valency constructions such as SCU (subject complement unit), VHC (verb head complex), PCU1/2/3 (predicate complement unit) and participant roles, etc. we follow Herbst and Schüller (2008). It is important to notice that in this way the traditional syntactic roles of ‘subject’ and ‘object’ are dispensed of. This approach to describing language-specific constructions paves the way to language universals.

⁴ APPENDICES:

APP.I. Divalent Reflexive (250 tokens, only a sample included)

APP.I.1. Main clause; a. Declarative, b. Imperative, c. Interrogative

APP.I.2. Coordinate structures: a. ‘and’, b. ‘but’, c. ‘and’+ opposites of *open*

APP.I.3. Divalent non-reflexive

APP.II. Divalent Reflexive + [*to*-INF]/Deranked purpose clause (192 tokens, only a sample included)

APP.II.1. Minimal clause

APP.II.2. Coordinate structures: a. ‘and’, b. ‘but’, c. ‘and’+ opposites of *open*

APP.III. Trivalent caused-motion construction

APP.IV. Resultative construction

APP.V. Adverbial clause constructions:

APP.V.1. ‘before’ a. and b.

APP.V.2. ‘when’ a. and b.

APP.V.3. ‘as’ a. and b.

APP.V.4. ‘if clause’ a. and b.

APP. VI. Relative clause with ground noun ‘time’

J9C ... money would just come whenever you open your mouths. You are at last realising the folly of ...

JYB Joe. "OK, what next?" He opened his mouth, shut it again and grinned sheepishly.

Divalent constructions are classified into *reflexive* and *non-reflexive*. That use is prototypical on two counts: i) considering the typically transitive character of the verb and ii) text frequency – the other important factor, 250 to 8. Of the two, the *reflexive* is by far the more common, hence – the basic construction in the corpus. The *non-reflexive* construction differs from the reflexive in that it lacks coreferentiality between the genitive form and the subject (see Stamenov 1977, Seizova-Nankova and Atanasova 2001).

3.3.3. Divalent Non-reflexive Construction/8 tokens

(1b.) HTM up to the wood. I_i must open your_{ii} mouth. Then you might speak to us. It came to

The example (1b) shares the same syntactic structure with (1a), the only difference being different indexation of subject and the genitive as part of the noun phrase [Gen + N] (APP. I. 3.).

3.3.4. Divalent Passive/1 token

H84 ... her case of painted cedarwood. Soon her mouth would be opened by the lector-priest and ...

SCU NP VHC_{pass} PCU1
[NP_{p_subj} 'AFFECTED']_would be opened_{act}_[PartP 'AGENT']

3.3.5. Analytical Causative with Resulting Attribute/1 token

CJE ... inevitable if the dog is not used to having its mouth opened. Yet if it is not alarmed by this ...

This construction can be represented as consisting of an introduction of an additional verb [to have] + complex object of keyword *mouth* + V-en form of open → [N_V-en]⁵: the analytical *have* + nominalization construction of *open mouth*: i.e. have one's mouth opened, an instantiation of the complex object construction with passive meaning.

3.3.6. Trivalent Caused-Motion Construction + [PartP]

→ [to / into / for / at / on / in / with / by_NP / [ADV] / 21 tokens (APP.III.)

JY5 Ravenous for more, she opened her mouth to him, greedily welcoming the invasion ...

SCU NP VHC_{act:3} PCU1 PCU2
[NP_{act_subj} 'AGENT']_opened_{act}_[NP 'AFFECTED'] [PartP GOAL]

The *trivalent* construction inherits properties of the *divalent reflexive*. The verb, which is typically divalent, functions as trivalent. There is a contribution of a new participant/argument characterized by a wide range of variations in realization. In terms of semantics, these uses vary from more prototypical to less so.

⁵ The so-called *complex object* constructions with familiar examples like: have one's hair cut, etc. (Minkoff 1958, Spasov 1992: 172, Downing and Locke 2006).

3.3.7. Trivalent Resultative Construction/[AdjP]/*wise*, *wiser*/10 tokens (APP.IV.)

HJ9 ... lectern, and he should practise opening his mouth II wider III when talking – he was sometimes difficult ...

SCU NP VHC_{act:3} PCU1 PCU2

[NP_{act_subj} ‘AGENT’]_wiped_{act}_[NP ‘AFFECTED’] [AdjP ‘PREDICATIVE’]

The *trivalent resultative* is based on the divalent reflexive construction, expressing relations between participants XY such as X causes Y to become Z, the latter element is realized by the only item-specific adjective of *wide* in both positive and comparative forms.

3.3.8. Quadrovalent Resultative Construction [Adj]/*wise* + [for_NP]/1 token

FPX ... taken it all down her gullet, she opened her mouth wide for his inspection. He smiled ...

SCU NP VHC_{act:4} PCU1 PCU2

PCU3

[NP_{act_subj} ‘AGENT’]_wiped_{act}_[NP ‘AFFECTED’] [AdjP ‘PREDICATIVE’]
[PartP ‘REASON’]

The *quadrovalent construction* is unique, realized by only 1 token. It is based on the *trivalent resultative* with the addition of another element. The adposition is introduced by *for* + NP → Gen + nominalization → *his inspection*, which we analyze as being on the border between complement and adjunct for its being felt as integrated to a high degree in the clause structure.

4. Findings And Discussion

The results from the classification of the valency constructions in the corpus are revealed in Table 1. It should be noted that all the instances in the corpus have been classified to the nine construction types and the hypothesis about construction being the basic linguistic unit – 100% confirmed.

Table 1. Frequency counts of valency constructions as instances of generalized argument structure constructions

Valency construction types	Instances of	FREQUENCY	%
<i>Monovalent ergative</i>	> <i>Intransitive</i>	4	0.8
<i>Divalent reflexive</i>	> <i>Monotransitive</i>	250	51.3
<i>Divalent non-reflexive</i>	> <i>Monotransitive</i>	8	1.6
<i>Divalent passive</i>	> <i>Passive</i>	1	0.2
<i>Trivalent caused-motion</i>	> <i>Ditransitive</i>	21	4.3
<i>Trivalent resultative</i>	> <i>Resultative</i>	10	2
<i>Analytical causative with resulting attribute</i>		1	0.2
<i>Quadrovalent resultative</i>		1	0.2
<i>Divalent reflexive elaborated by [to-INF]</i>		192	39.4
Total:		488	100 %

Table 1 gives a list of nine different types of valency constructions with their relative frequency. Having in mind the taxonomy hierarchy of Radical Construction Grammar representation of constructions (Croft 2001: 25–26), they can be analyzed as instances of more schematic/argument structure constructions with the exception of the last one – divalent reflexive elaborated by [*to*-INF] (discussed below).

4.1. The Corpus Voice Continuum

Recent typological research uses the **semantic map model** as a representation of both what is universal and what is specific in language. The voice continuum consists of the *syntactic space* (description of the distribution of the particular constructions), *conceptual space* (a representation of a particular bound region in our case the voice continuum), and *semantic maps* (which consist of language specific representation of speakers' knowledge).

4.1.a. Syntactic Space⁶

The purpose of the research is to compare the corpus-specific voice constructions based on collocational dependency as exemplified in (1a) – (1d) below with the prototypical English voice constructions as represented in Table 2. and Figure 1, Figure 2 and Figure 3 to be discussed below (listed as Table 4.2. and Figures 4.1., 4.2., 4.3. respectively in Croft 2001: 135, 137, 138).

- (1) a. JY9 [Ashley (obediently) opened her mouth.] “So I’m expected to act as though ...
- b. HTM ... up to the wood. [“I must open your mouth.] Then you might speak to us. It came to ...
- c. A6C ... the girl looked at the audience, [her mouth slowly opened] and on her face was an expression ...
- d. JY5 Ravenous for more, [she opened her mouth to him], greedily welcoming the invasion ...

The three means of encoding participant roles according to typology theory are case marking, indexation and word order (Croft 2003: 142–143). We have considered in our description of the morphosyntactic properties of the collocation-specific (argument structure) voice constructions above (3.3.) the constituency of the constructions, the part-whole relations between construction and its parts and between the parts themselves, and, of course, pre-verbal and post-verbal use of the keyword *mouth*. The genitive forms play an important role as they index discourse referents expressed as syntactic arguments, cf. (1a)–(1d). Being a modifier, the genitive is a semantic argument within a larger noun phrase which is also an argument (Lehman in Croft 2001: 247), hence, the two divalent constructions. Of the two means of encoding participant roles, coding marking and indexation, the latter is less important from a typological perspective as it is related to the behavioral potential of the

⁶ A syntactic space, defined on structural properties of constructions that are cross-linguistically-valid, allows one to develop a proper typological classification of languages that respects the continuum of constructions found in the world’s languages for any given region of conceptual space (Croft 2001: 312).

constructions⁷. What has yet to be done, however, is by using the following letter abbreviations of the argument phrases (Croft 2003: 143) to make distinctions not found in the traditional terminology:

- S: intransitive subject participant role cluster
- A: transitive or ditransitive participant role cluster
- P: transitive direct object participant role cluster
- T: ditransitive direct object participant role cluster
- G: ditransitive indirect object participant role cluster

At the foreground comes the cross-linguistic variation of polysemous participant roles hence they are described as *clusters* in intransitive, transitive and ditransitive clauses by means of the cross-linguistic comparison on the basis of syntax-free, external, conceptual categories of semantic roles (ibid.: 14–15).

The structural diversity of the voice constructions in the corpus⁸ represented here in the *syntactic space* presents the encoding of arguments of *open* as action verb, sharing not only a common verb but also a common argument *mouth* found in different word order configurations. In traditional grammatical terms, the examples in (1a) and (1b) above have two arguments; (1c) has one argument; (1d) has three arguments.

Table 2. *Distribution of NP positions in English*

	[_ V NP]	[NP V _]
A	√	*
S	√	*
P	*	√

⁷ “Indexation, however, does not directly code the semantic relation between participant and event. Hence it is not an instance of structural coding. Instead, indexation cross-references the argument. This can be interpreted as an instance of inflectional behavioral potential: a grammatical phenomenon triggered by the semantic role of the participant. The behavioral potential of indexation defines grammatical categories that can be mapped onto conceptual space ... behavioral potential is associated with the typologically less marked categories” (Croft 2003: 147). In the corpus, only the genitive in the direct object noun phrase is accessible to the janus-faced meaning potential of its being either co-referential or not with the subject. The genitive as modifier of *mouth* in subject position loses this potential expressing only part-whole relation. We can hypothesize that GR hierarchy applies to indexation as well.

⁸ An overview of the idiosyncratic features of the constructions involves i) the causative verb *open* collocationally dependent on keyword *mouth*, ii) generally capable of forming different configurations with arguments, but with this collocation delimited only to the domain of the keyword, and iii) last, but not least, the role of the Genitive construction [Gen + *mouth*] itself – the most specific feature of the voice constructions found in English but not in other languages (Table 5). Frequency counts point that use of Genitive forms makes 98.6 % in the corpus (exception of 7 tokens: 2 tokens with zero (Ø) determiner, and 5 – with definite article *the*).

A feature of the corpus voice continuum is the existence of two different two-participant role constructions as shown in (1a) and (1b). Both of them exhibit similar distribution properties with the English prototype. The notion of *basic voice type*⁹ is adopted from typological theory following Croft (2001: 285). It relies on various criteria most significant of which being text frequency hence, the *divalent reflexive* construction is qualified as the basic and most frequent voice construction in the corpus. The distribution of the NP positions [_{NP} V NP] and NP V [_{NP}] encoding the syntactic roles of the collocation-specific constructions as in (1a), (1b), and (1c)¹⁰, however, differs from the English prototype (Croft 2001: 135)¹¹ not in the distribution itself but in the lack of pronominal case marking as these positions are by default lexically-specified and realized by the *mouth* noun phrase, which imposes restrictions on the use of pronominal P and S. The generalization thus formed concerns not only the voice constructions of the present collocation but also all N_V body part collocations exhibiting these uses and it will be further supported by observing Figure 1, Figure 2, and Figure 3 (Croft 2001: 136, 137, 138 respectively).

Figure 1 represents the first step towards developing universals of syntactic roles in Radical Construction Grammar (Croft 2001: 135). Universal syntactic roles, posited by many syntactic theories, are done away with and language-specific ones are used instead. Typology distinguishes structural types and language types as languages also vary in exactly which participant roles are subsumed under S, A, P and so on.

The principles of typological markedness impose constraints on the structural type of constructions (compare the ‘accusative’ and ‘ergative’ language types exemplified by English and Yuwaalaraay respectively). The distributional properties for syntactic roles are illustrated both in position and case marking. Judging by what was said above, the figure shows very well how different from both the English and the Yuwaalaraay the corpus constructions are, essentially in the lack of pronominal case marking.

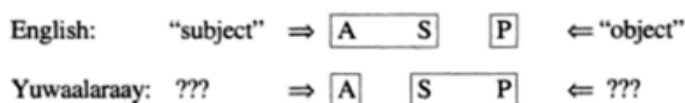


Figure 1. *Distributional properties (occurrence in syntactic position/with case affixes) for syntactic roles of English and Yuwaalaraay*

⁹ Basic voice construction: an argument structure construction that conforms to the prototypical parallel ranking of participant role and argument salience. [...] Basic voice constructions are also called ‘active’ or ‘direct’ constructions (Croft 2021: Glossary of terms)

¹⁰ We focus here on the intransitive and transitive situations, discussion of (d). for the time being is left for later – see *Trivalent* (aka *ditransitive*) construction below) (see Stassen 1997).

¹¹ Construction grammar’s great attraction as a theory of grammar – not just syntax – is that it provides a uniform model of grammatical representation and at the same time captures a broader range of empirical phenomena than componential models of grammar. For the same reason, construction grammar also provides the most general and neutral way to describe the distributional method (Croft 2001: 17).

Thus by comparing and contrasting the morphosyntactic properties of the constructions, we extend our knowledge of the present collocation and the similar ones quoted above (Section 2) both to the English language and also across languages. The next step is to map the syntactic space of the intransitive and transitive situations forming a cluster for participants onto conceptual space shown by Figure 2.

4.1.b. Conceptual Space

The conceptual space represents a universal pattern in the semantic map model (Croft 2021: Glossary of terms)¹². This is an underlying network of semantic relationships among functions that are co-expressed across the world's languages. The notion of conceptual space is important as it represents the semantic relations that hold between the two situations. The horizontal dimension represents the clausal constructions, and the vertical dimension represents the interrelated semantic participant role clusters, which are specific for each event type (ibid.: 137).

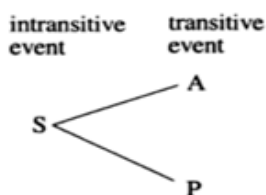


Figure 2. Conceptual space for participant roles in transitive and intransitive situations

The *ergative* construction illustrated by example (1c) above is subsumed under the intransitive construction (IntrSbj IntrV) but differs from the English prototype in that the S and the P positions are lexically-specified by definition. Both participant roles have same form and are always nonpronominally expressed. We find that model also in Bulgarian¹³ with verbs that follow an ergative alignment. The *clause* construction SbjArg (‘subject as argument’) and Pred, on the other hand, captures “only the generalization about the subject arguments of Transitive and Intransitive clauses” (capitalized in Croft 2001: 57), thus the two subject arguments A + S are generalized (Croft 2001: 148), which makes the picture complicated. Most importantly, the construction¹⁴ is restricted in its use only to a certain group of transitive-intransitive *action verbs* called ergative pairs (alternations) (Levin 1993, Stanchev 2001: 86–93, Downing and Locke 2006: 91, 132–4, 138).

¹² Cf. also Figure 8.1. in Croft (2001: 284) about the conceptual space of active-passive-inverse voice.

¹³ Minkoff 1958: 118, 122–123, also Bratanova 2010, 2020, Penakova 2004).

¹⁴ *Radical Construction Grammar* advocates that “each language has its own categories for syntactic roles.” [...] “In fact, syntactic roles are also construction-specific.” It examines “the similarities and differences between language-specific categories in order to find universals such as those with parts of speech” (Croft 2001: 136). What is done here, is comparison of the collocation-specific constructions to the language-specific ones for English.

4.1.c. Semantic Maps

A semantic map in general represents a language-specific morphosyntactic category as part of the semantic map model (Croft 2021: Glossary of terms). The semantic maps in Figure 3 are a representation of the set of functions in a conceptual space that are coexpressed by a particular form in a particular language¹⁵ and are a manifestation of speakers' knowledge.

The first and the second maps represent English and Yuwaalaraay respectively (already discussed above). The fourth map is a rare one (Dixon in Croft 2001: 138), in it all forms for S, A, and P roles are distinct. But, it is the third semantic map that is of special interest to us as it represents no distinction in case marking. We might be tempted to think that the voice constructions share common features in terms of coding and behavioural packaging. That is true only to a certain extent, as, for example, the third map represents the rarer distribution pattern in English. Even so, we claim that the corpus data confirms the idiosyncratic character of these constructions. To make that statement clear, we can compare *open mouth* with *open door* (Fillmore in Molhova and Seizova-Nankova 1996). The lexicogrammatical properties interact differently with the morphosyntactic ones in that in *open door* the verb is the keyword, while in *open mouth*, the keyword is *mouth* (easily to be observed if one runs a quick search – not to be discussed in greater detail here for lack of space). Thus, that difference reflects on the morphosyntactic and discourse-pragmatic features of the constructions.

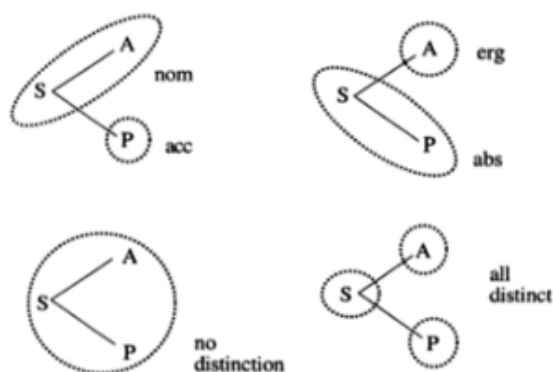


Figure 3. Semantic maps of syntactic roles defined by case coding

To further refine the generalization made above, we claim that it is important for us to take into consideration the lexicogrammatical properties of the V_N body part collocations as they are idiosyncratic and rather on the idiomatic side (Nunberg et al. 1994). We also claim that our observations pertain not only to the present collocation but also to the body part collocations with attested voice constructions in their syntactic space. For example, *lend a hand* and *change hands* do not have

¹⁵ They are usually represented by a line encircling the set of functions in the conceptual space.

them (Seizova-Nankova 2016a: 225–226, 2019), while *wring hands*, etc. do (ibid: 272–273). That is the basic contribution to the presentation of the *open mouth* voice constructions in relation to the English prototypes, the more so as the description has been done in a cross-linguistically valid form. What is more, lexicogrammar interacts in unique ways with the morphosyntactic properties of the constructions.

➤ The Passive Construction

We now turn to the passive construction. For the purpose, we use another notion adopted from typological theory, i.e. *derived structural definition* of a construction, applied for the definition of the passive (Croft 2001: 285). Thus the list of constructions will be increased with two more constructions exemplified in (1e) and (1f):

- (1) e. H84 ... her case of painted cedarwood. Soon [her mouth would be opened by the lector-priest] and ...
 f. CJE ... inevitable if [the dog is not used to having its mouth opened]. Yet if it is not alarmed by this ...

First we will tackle example in (1e), and then move on to (1f) (see below).

The basic voice type¹⁶ provides the basis for defining the encoding of Subject, Object, and Oblique roles (capitalized in Croft)¹⁷. The definitions are construction-specific, especially the coding constructions of A, P, and V as part of the Active construction (Croft 2001: 285). The English Passive Voice construction¹⁸ will be defined not in functional terms, but in structural terms in comparison with the active voice as is the way of constructing universal models of passive (Table 3). The derived structural definition is an acceptable method for typological comparison as long as it is ultimately grounded in functional categories (Croft 2001: 285–286).

¹⁶ The definitions of the English active voice include defining the encoding of Subject (the case marking and the agreement associated with it), Object and Oblique roles. The A and P participants are by definition the Subject and the Object respectively. Any other argument is by definition an Oblique. These definitions are construction-specific, in particular the coding constructions of A, P, and V found as part of the Active construction (ibid.: 285).

¹⁷ In Croft's notational system, capital letters are used for language-specific constructions and construction-specific categories. We compare the collocation-specific constructions of the *open mouth* to the basic voice construction for English in relation to which derived definitions of the other voice constructions in the language are given (if any) (see footnote 15).

¹⁸ The English Passive can be described in contrast to the English Active, as in (3):

(3) *Passive*

- a. A is encoded by an Oblique (if at all)
 b. P is encoded like a Subject

V is morphologically distinct from V in the Active (Croft 2001: 285).

It “has been taken as the model for a cross-linguistic structural characterization of the passive voice as a universal construction. Nonactive voice forms in other languages are identified as passive (or not) in comparison to the Passive of English and other European languages” (ibid.: 286).

The passive construction exemplified in (1e) (repeated here for convenience' sake) seems to have the prototypical form, that is A (*the lector-priest*) is encoded by an Oblique, P (*her mouth*) is encoded like a subject, and V is morphologically distinct from V in the Active (*would be opened*). What follows is a comparison of the English Active voice and Passive voice construction with the Cree basic (Direct) and Inverse construction (Table 3. and Table 4.). Cf. example (1e):

(1e). H84 ... her case of painted cedarwood. Soon her mouth would be opened by the lector-priest and ...

Table 3. *The English Active voice and Passive voice construction*

	English Active voice	English Passive voice
a.	A is encoded by a Subject	A is encoded by an Oblique (if it is expressed at all)\
b.	P is encoded by an Object	P is encoded like a Subject
c.	V found as part of the Active	V is morphologically distinct from V in the Active

This is only at first sight, though. If we follow the instruction and give it a derived structural definition in respect to the basic voice construction – *She opened her mouth*, then it would be something like *Her mouth/P was opened*. Such instances are, however, not attested in the corpus. Besides, we are interested not in what is possible but in what is actually the case. The participant role of ‘lector-priest’ is external to the core event. Such a passive construction is a type of nonbasic voice construction called the passive-inverse voice construction (Croft 2021: Glossary of terms). If I am right, it expresses a situation, where the P participant/*mouth* has a higher discourse salience than the A participant/*lector-priest*¹⁹ (ibid.). The explanation for that highly specific passive construction can be sought for in the ranking of events²⁰ by their likelihood to be expressed by the transitive construction: cf: Transitivity Hierarchy²¹, and the function of the argument structure construction²². An

¹⁹ The English Passive Construction, as in *The boys were followed by a mountain lion*, is an instance of the passive-inverse voice construction. (Croft 2021: Glossary of terms).

²⁰ Nonbasic voice construction: an argument structure construction that does not conform to the prototypical parallel ranking of participant role and argument salience. Example: *The salmon were eaten by grizzlies* is an instance of a nonbasic voice construction. Nonbasic voice constructions include the passive-inverse voice construction, the antipassive construction, the causative construction and the applicative construction (Croft 2021: Glossary of terms).

²¹ Definition of Transitive Hierarchy: a ranking of events by their likelihood to be expressed by the transitive construction (the ‘more transitive’ end of the hierarchy) or a subject oblique construction (the ‘less transitive’ end of the hierarchy) (Croft 2021: Glossary of terms).

²² The function of the argument structure construction is its semantics – the participant roles that the referents of the argument phrases are playing in the event – combined with its information packaging – the relative salience implied by the Subject – Object – Oblique ranking of argument phrases (Croft 2021: Glossary of terms).

open mouth event where an agent expressing A role and a patient expressing P role, which itself is (body) part of the agent, does not belong to the single, ‘most prototypical’ exemplar of transitive constructions. The passive (only 1 token) is generally connected with topicality, so we can conclude that this function is highly unlikely for the collocation under discussion. “There is a long tradition in descriptive and typological studies that identifies a construction type distinct from both the active and the passive (in their putative universal form)” (ibid.: 286), i. e. the inverse construction (found in the Algokian language Cree). It is given a derived structural definition in relation to the DIRECT form²³. Compare the Cree Inverse with the passive type in Table 3. in respect to point a., repeated here: A is encoded by an Oblique vs A is coded like an Object.

Table 4. *The Cree basic (Direct) and Inverse construction*

	The Cree Direct	The Cree Inverse
a.	The coding of A as Subject	A is coded like Object
b.	The coding of P as Object	P is coded like a Subject
c.	The expression of V, with the Direct suffix	V is morphologically distinct from V in the Direct

Thus, the Passive construction found in the corpus/one token, is exceptional, and, in that sense, different from the English prototype.

➤ **The Trivalent Construction (aka Ditransitive Construction)**

It is important to notice that the *trivalent* construction is not mentioned at all in the dictionary definition. Cf. examples in (2a), (2b), and (2c), illustrating the more popular causal chain with *to* with semantic role RECIPIENT²⁴: (*Caroline/she/you* → *mouth* → *me/him/our Michael*)

- (2) a. JY7 ... whispered, “Caroline, bellissima ... Open your mouth to me. Let me taste you.”
 b. JY5 Ravenous for more, she opened her mouth to him, greedily welcoming the invasion ...
 c. KSS ... it’s time you opened your mouth to our Michael, don’t be afraid of him ...

²³ Again we define the coding of A in the basic (Direct) construction as Subject, the coding of P as Object, and the expression of V, with the Direct suffix, as the basic verb form. The inverse can then be compared to the Direct: a. A is coded like an Object, b. P is coded like a Subject and c. V is morphologically distinct from V in the Direct.

²⁴ Recipient (sem): a semantic role including participant roles for a participant that receives an entity from another participant. Also compare participant role with semantic role (aka thematic role) (sem): a generalization across participant roles that are semantically similar from one event class to another. Example: many events involve a person who volitionally initiates the event, and this more general role is typically called the ‘agent’ role (Croft 2021: Glossary of terms).

Other less prototypical uses (APP.III) are: [*with*_NP], similar to [*to*_NP] but with the semantic role of COMITATIVE²⁵ (do something together) (*you* → *mouth* → *those two*) (*mouth* has a somewhat abstract or metaphorical meaning = *speak*) (1 token), [*at*_NP] (2 tokens) homonymous uses with different semantics of PATH²⁶ / *at Roirhak* or EVENT²⁷ *at the 9.30 briefing before the President*, [*on*_NP]/*on this recording* has the TOPIC role, [*by*_V-ing]/*by slipping his thumb in at the side* introduces an (external) AGENT, [*in*_NP]/*in a thin smile*, *in a soundless mew*, *in a silent scream*, *in a voiceless scream* show what happens as a RESULT of the movement, and, *in drama lessons* (EVENT) has special spatiotemporal characteristics combining definite time and place, [ADV]/*up* is used with metaphorical extension of meaning, 1 token showing upward DIRECTION/PATH.

The oblique participants ([PP]) in the trivalent/ditransitive construction realize a variety of roles, some more some less prototypical. A group of examples shown below and analyzed as expressing RESULT of the movement, raise the question of the distinction between the caused-motion construction and the resultative construction, explanation for which was found in the two theories of event lexicalization and argument realization (Levin and Rappaport Hovav in Croft 2015: 103), especially in the verbal semantics and event decomposition such as CAUSE, DO, BECOME, and (result) STATE. These subevents connected with each participant of the construction are causal (CAUSE) as well as aspectual (BECOME), while subevents such as DO appear to be both causal and aspectual, involving both agency and process (Croft 2015: 104). The latter case with DO seems to adequately explain the following situations:

CDN The piece of lard opened its lipsticked mouth in a thin smile at the next arrival ...

FU2 The cat looked at Lyn and opened its mouth in a soundless mew.

CLK ... and one of the corpses opens its mouth in a silent scream.

CLK The soul pupa opens its mouth in a voiceless scream.

H7H ... burst into tears and, as she opened her mouth for a bellow ...

The last example [*for*_NP]/*for a bellow* formally different from [*in*_NP] examples can be interpreted in a way similar to them, i.e. *the mouth* expressing emis-

²⁵ Concomitant role (sem): a subset of antecedent roles that includes participant roles in between the participant role expressed as subject and the participant role expressed as object. Example: in *Jack broke the window with a hammer*, the hammer is antecedent to the window in the breaking causal chain (Jack → hammer → window), and the window is expressed as object; and it is also subsequent to Jack in the breaking causal chain, and Jack is expressed as subject (Croft 2021: Glossary of terms).

²⁶ Path (of motion) event/verb: an event that describes motion of a figure along a spatial path relative to a ground; and the verb expressing such an event (Croft 2021: Glossary of terms).

²⁷ Event (aka eventuality, situation, state of affairs, SOA): a superordinate category including both action concepts and state concepts. The term ‘event’ has other meanings, including what we call a telic event. Other terms listed above are also used for ‘event’ as it is defined here (Croft 2021: Glossary of terms).

sion of a deep, loud roar, typically in pain or anger simply by a change of its physical form/position (Iwata 2008, 2017). The clauses construe the event as a single linear, asymmetric causal chain (Croft 2015: 106). The two theories help explain the crucial semantic distinctions of the two types of event structure – between the caused-motion construction expressing result and the resultative construction (see below), on the one hand, and, between constructions expressing directed change and undirected change (directed change being the more specific semantic property of events that will distinguish manner and result verbs²⁸), on the other hand, which should be made distinct (ibid.: 125). For lack of space we shall not go into greater details here. That approach has the obvious advantage of combining the causal and the aspectual aspects of the events by at the same time keeping them separate so that “the best representation should represent aspectual and causal structure independently, albeit integrated in a single structure” (Croft 2015: 126–127).

The construction is an extension of the conceptual space of the intransitive, and transitive situations with the ditransitive situation, as illustrated in Figure 4 (listed as Figure 5.7 in Croft 2003: 154) (see also section 4.1.a. above). Some collocations have ergative alterations with the ditransitive (e.g. *wring hand(s)* collocation in Seizova-Nankova 2016b), but not the present collocation and that’s one reason why we discuss it separately from the intransitive and transitive situations.

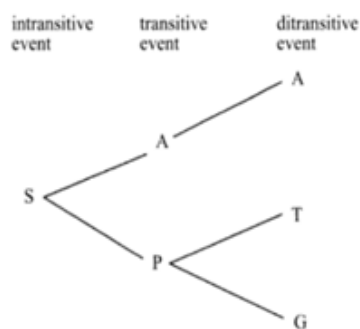


Figure 4. Conceptual space for intransitive, transitive and ditransitive participant roles

➤ The Analytical Causative with Resulting Attribute Construction

It is found in English expressions like *cut: have o’s hair cut*, and also in other body part collocations²⁹ as well. Cf. example (1f):

(1f.) CJE ... inevitable if the dog is not used to having its mouth opened. Yet if it is not alarmed by this ...

²⁸ Talmy (in Croft 2015: 118) makes essentially the same distinction between verb-framing (result) and satellite-framing (manner) realizations of events. The event with *open* in the situation above has result realization while, for example, the case with *wipe hands* collocation in Seizova-Nankova 2016b, has manner realization of events.

²⁹ Example from *clench hands* collocation: He could see *his hand clenched* against the grimed crack of the ..., etc (Seizova-Nankova 2016a: 267).

It expresses a passive meaning with the *open mouth* event nominalized; such uses are called grammatical metaphors (Seizova-Nankova 2016b). They have lexically-specified elements and the verb is realized in its deranked *V-en* form in postposition to *mouth* → [N V-en] → [*its mouth opened*]³⁰. In a crosslinguistically consistent fashion, it is defined as the complex predicate *passive-inverse voice strategy* “that encodes the fact that the subject referring phrase expresses the P participant” (Croft 2021: Glossary of terms³¹). Another feature of the construction is that it involves the causative verb *have* as a second verb to *open*. *Have* together with the expression *mouth opened* realizes a combination of semantic content – *have* something done – with passive information packaging (ibid.).

To sum up, the lexicogrammar of *open mouth* collocation like most other V_N/body part collocations is idiosyncratic. The body part *mouth* functioning as object to the verbal element *open* appears to be an argument but does not often refer to an actual discourse participant as in terms of topicality and information packaging it is only found in the ergative, the passive, and the analytical causative with resulting attribute constructions = total 10 tokens, i. e. in 2% of the corpus, which has been explained above (see footnote 20, 21, 22, 23).

➤The Resultative Construction

That is another trivalent construction with frequency of 10 tokens, again not mentioned in the dictionary definition. Based on the divalent construction (not necessarily reflexive or non-reflexive), it has an additional participant describing a state as a result of the *open mouth* event. The verb *open* acts differently from the causative construction in which X causes Y to move Z³². It acts as a complex predicate³³ in which X causes Y to become Z, that is, X acts on Y so that as a result it changes to a state Z. The stative event temporally follows the main predicate event. A resultative complex predicate is participant-oriented (Croft 2021: Glossary of terms), i.e. *mouth (is) wide (opened)*. The stative component is lexically-filled by the adjective *wide*, restricted either to its positive or comparative form. Cf.:

³⁰ “It distances us from the event, raising the representation of a situation to a higher level of abstraction. Once objectified and depersonalized in this way, the event or abstraction is conceptualized as if it had temporal persistence, instead of the transience associated with a verb” (Downing and Locke 2006: 162–163).

³¹ Complex predicate passive-inverse (voice) strategy): a strategy for the passive inverse voice construction in which there is a second verb accompanying the main verb that encodes the fact that the subject referring phrase expresses the P participant (Croft 2021: Glossary of terms).

³² A causal event is simply a causative event based on a monovalent base event (Croft 2021: Glossary of terms, see also Bratanova 2010).

³³ A resultative (complex predicate) is a stative complex predicate in which the stative component of the complex predicate describes a state that results from the performance of the event denoted by the main predicate (Croft 2021: ibid.).

- (3) JY6 His lips compelled her to open her mouth yet wider beneath the command of his, to ...
 HH0 ... jabs at the back of her throat, opening her mouth wide.
 H9V “I know what I said. Now, open your mouth – not wide!” he reproved ...

We now turn to the description of the syntactic space of *the corpus complex sentence continuum* to reveal the regions between coordination and adverbial clauses, between coordination and complements, and between adverbial clauses and relative clauses (Croft 2001: 322³⁴). The quadrovalent construction (1 token), an extended version of the resultative having a participant-oriented resultative complex predicate with another adverbial element added to it which is closely integrated into the clause structure.

4.2. The Corpus Complex Sentence Continuum

Following Croft (2001: 354), we analyze the domain of complex sentences³⁵ as a continuum between coordination and subordination, which reflects connections in the conceptual space underlying complex sentence types (2001: 354).

4.2.a. Complex Sentences Syntactic Space

The form and function of complex sentences in the corpus is quite complicated. There are syntactic constructions that encode any pair of the four traditional types of complex sentence constructions (coordinate structures, in which the two clauses are syntactically equal and finite; complex structures with three types of subordinate clauses: adverbial, complement and relative clauses, syntactically dependent on the mainclause³⁶ (MC) and typically different in form from them, either non-finite or subjunctive (the definition of verb forms found in complex sentences is a derived structural definition – cf. above, on non-active voice forms, called deranked³⁷). The continuum is a conceptual space where the traditional classification is best captured by conceptual distinctions (ibid.: 321–322).

The corpus constructions expressing the *open mouth* event involve “a main clause as in a simple sentence or a coordinate (complex figure) construction” called balanced and adverbial clause constructions called deranked in relation to the main clause (Cristofaro in Croft 2001: 359). There are a number of action verbs like *open* that are expressed by single clauses [...] representing what Pawley calls ‘a core of conceptual events’ (in Croft 2003: 224). They fall into three types – such that

³⁴ See also Figure 9.1 in Croft (2001: 322).

³⁵ Complex sentence: a construction made up of more than one clausal construction. Example: [The birds were singing] [when I went out to get the newspaper] is an instance of a complex sentence construction consisting of two clauses, indicated by square brackets in the example (Croft 2021: Glossary of terms).

³⁶ It is the typologically unmarked clause type (Croft 2001: 359).

³⁷ The phenomenon of deranking (Stassen, Koptevskaya Tamm, Cristofaro in Croft 2001: 321 is also called desententialization (Lehmann in Croft ibid.) and deverbalization (Croft 1991 in Croft ibid.).

are never, sometimes, or always³⁸ expressed by single clauses. According to corpus evidence, the two divalent constructions are only *sometimes* expressed by a main clause as in a single sentence. Cf. (4) (APP.I.1.a. and APP.I.3.):

- (4) a. JY9 [Ashley (obediently) opened her mouth.] “So I’m expected to act as though ...
 b. HTM ... up to the wood. [I must open your mouth.] Then you might speak to us. It came to ...

The attested coordinate (complex figure) constructions are basically of two types: with a conjunction ‘and’ and ‘but’ (Wierzbicka³⁹ in Croft 2001: 336). Joining two sentences with a conjunction is possible only when a speaker can conceive of the two events as a single whole. The single whole corresponds to the Gestalt notion of a single, unified figure called complex figure sentences, cf. (5), (6), and (7):

(5) Complex figure sentences + ‘and’ (APP.I.2.a.) [addition of syntactically equal clauses]:

CR6 ... looked like a golden angel. She opened her mouth and spoke. “I meant what I said, ...

FSB ... hurt it. Then the monster opened its mouth and called: “Hoo-woo!” ...

CH0 ... battles, vanquished many foes. He opened his mouth, and sang the song of the One-Eyed White ...

KB8 According to Jim she’s never opened her mouth and said a single thing yet ...

BMS “Congrats on your exams, Cal.” She’d opened her mouth: what about my results?

(6) Complex figure sentences + ‘but’ (APP.I.2.b.) [contrast, opposition]:

JYF ... that his eyes were gentle. She opened her mouth, but the word ‘goodnight’ wouldn’t come ...

HGK ... brought Maggie back to life. She opened her mouth but Mitch took a tight grip on her arm ...

A0N ... waist, stopping him, he tried to open his mouth but his jaw-bones jammed, he was choking ...

AC4 You’re not my parents. Tug opened his mouth automatically, but for the first time since ...

(7) Complex figure sentences + ‘and’ (also *then*) + opposites *open* vs. *close* and *shut* (APP.I.2.c.) [reverse meaning, change to opposite]:

HRA The adjutant opened his mouth, then *closed* it. “Never mind,” he said.

HGY ... blinked to accustom her eyes, opened her mouth – and *closed* it again.

H7W ... with quiet menace. Polly opened her mouth, and *closed* it again quickly.

F99 ... brow knitting painfully. He opened his mouth, then *shut* it again.

³⁸ The *spread hands* collocation (114 tokens in the corpus) is an example of an action verb which is **always** expressed by single clauses (Seizova-Nankova 2016a: 247–252) excluding the grammatical metaphor uses (7 tokens) with variations [(with) *his/her hands spread across/2, on/3, against/1, to/1.*], e.g. GWF ... packs on their trail. Ratagan stood *with his hands spread to the fire and the flames winking*..., an instance of use changing the prototypical construal of an event from dynamic to stative.

³⁹ Wierzbicka (in Croft 2001: 336) argues that joining two sentences with a conjunction (not just ‘and’ but also ‘but’) is possible only when a speaker can conceive of the two events as a single whole.

➤ Adverbial Clause Hierarchy

Adverbial clauses contrast with main clauses and coordinate sentences, hence they are called deranked in relation to the main, balanced clause. Cristofaro (in Croft 2001: 358) identifies a series of implicational hierarchies for the expression of subordinate events in complex sentences. She classifies the semantic relation between an adverbial clause and its main clause in terms of the semantic relation between the states of affairs denoted by the two clauses (Croft 2001: 357–358)⁴⁰.

➤ Adverbial Deranking Hierarchy

purpose < before < after, when < reason, reality condition

Of these only the underlined are attested in the corpus.

1. The deranked purpose clauses

In contrast to the balanced strategy and the complex figure conceptualization, in the deranked strategy the predicate in the complex sentence does not recruit the predicate construction in that it lacks inflection (does not inflect for Tense – Mood – Aspect), and is always overtly coded with the *to* particle of the verb as infinitive. The criteria of typological markedness in these subordinate forms show limited behavioural potential (deranked strategy in Croft 2021: Glossary of terms). The sentences with deranked purpose clauses (APP.II.), represent the second most frequent structure in the corpus (192 tokens) and, notably, it has been mentioned in the dictionary definition. We will call it a *minimal* structure as it is like a single event as in main clause or in coordinate (complex figure) sentence, behaving like a Gestalt. For other reasons, we will also call it a *serial verb construction*.

These sentences can be compared to the balanced clauses in APP.I. (4), (5), (6), (7) above as having uses analogical to them. Cf. (8), (9), (10), (11) in APP.II. (1), (2a), (2b), (2c):

(8) *Minimal* structure elaborated by a purpose clause (APP.II.1.):

CEU ... said the Thing. Masklin opened his mouth to speak. But there were times ...
 HA3 Rincewind opened his mouth to do so. Kring hummed a warning ...
 CR6 ... blood run cold in his veins. He opened his mouth to answer. Both women were looking at him ...

These, of course, are easily used by complementing and modifying the deranked verb. Consider the following sentence:

H8J ... grinned and hurried away. Claudia opened her mouth to say she would call a taxi for herself ...

(9) Complex figure sentences elaborated by a purpose clause + ‘and’ (APP.II.2.a.):

JXT ... galloping uncontrollably. She opened her mouth to speak and found she couldn’t.

JY3 He saw her open her mouth to argue, and his eyes hardened a fraction ...

HTY He looked at her, opened his mouth to reply and wished that he had an answer ...

CEU He opened his mouth to shout at the Thing, and the walls exploded ...

⁴⁰ See also *Subordinate Clause Deranking Hierarchy* (Cristofaro in Croft 2001: 359)

(10) Complex figure sentences elaborated by a purpose clause + ‘but’ (APP.II.2.b.):
 GW3 ... she turned to her mother, opened her mouth to speak but, apparently, changed her mind ...

B1X Father Devlin opened his mouth to say something, but Bull O’Malley raised ...

GWG At one stage Marshall opened his mouth to interject but Wickham stopped him.

GVP Iris opened her mouth to contradict, but Melissa nudged her under ...

(11) Complex figure sentences elaborated by a purpose clause ‘and + opposites: *open* vs. *close/shut* (APP.II.2.c.):

G17 Orcadai opened his mouth to speak, and then *closed* it again.

JY4 Ruth opened her mouth to protest but *closed* it again.

EVG Patrick opened his mouth to reply and then *closed* it again.

CMJ Laura opened her mouth to say, The Church, of course, and *shut* ...

The minimal structure is used in every complex figure sentence elaborated by a deranked purpose clause (APP.II.2a, 2b, 2c), just like the MC (APP.I.2a, 2b, 2c). The main differences between (5) and (8), is i) between main clause (MC) and the minimal structure characterized by an addition of a deranked purpose clause, ii) and what seems to be of primary importance, has to do with constructions of the SAP status in APP.I., which is only accessible to the main clause. The distinction of reflexive vs. non-reflexive is reintroduced as it is relevant for the discussion of the SAP (speech act participant) status of participants in the constructions. Only the non-reflexive construction (8 tokens, APP.I.3.) can be analyzed in that fashion. Looking at Table 5. we see that the genitive pronouns stand very high on the Animacy Hierarchy (Croft 2003: 180), further borne out by frequency data (the very few exceptions are negligible in that respect).

Table 5. Frequency counts of the genitive form

his	her	your	my	its	their	the	ø
182(5m) ⁵	178(2m)	48(3m)	31	23(2m)	19(1m)	5	2(1m)
37,3%	36,4%	10%	6,4%	4,7%	3,8%	1%	0,4%

Third person pronouns in the role of nonparticipant typically refer to humans, only 23% of *it/its* refer to inhuman and inanimate, first and second person pronouns are always humans. They function in the role of speaker and hearer/addressee and do not differ from each other in natural agentivity (Croft 2003: 180). Speech acts can be both direct and indirect. The speech act status of the referents (speaker/addressee vs. nonparticipant) as reflected in the corpus of the non-reflexive construction is as follows: A – realized by first prn/4x, second prn/1x, and third prn/3x as compared to P – realized by first prn/Ø, second prn/3x, and third prn/5x. Even on that small scale, it confirms the SAP hierarchy – 1, 2, → 3 – of the voice constructions, (cf.

APP.I.3.⁴¹). That fact draws the dividing line between APP.I, (especially subcorpora APP.I.1a., 1b., 1c.) on the one hand, and APP.II. (especially subcorpus APP.II.1.), on the other. Other direct speech act constructions attested in the corpus are: the imperative functioning as directives, the interrogative functioning as questions (APP.I.2b. and 2c. respectively) and the conditional (*if* clause) construction (expressing threat) (APP.V.4a.).

Deranked purpose clauses occupy the semantic regions between coordination and adverbial subordination and also between complementation and adverbial subordination⁴².

➤ The region between coordination and adverbial subordination (Croft 2001: 322, 326)

1. We compare examples from (5) and (8) above: cf.:

(5) Complex figure sentences + “and” (APP.I.2.a.). Cf.:

CR6 ... looked like a golden angel. She opened her mouth and spoke. “I meant ...

(8) A sentence elaborated by a deranked purpose clause (APP.II.1.). Cf.:

CEU ... said the Thing. Masklin opened his mouth to speak. But there were times ...

We find two construals sharing the same semantic content: complex figure sentence with ‘and’ and a sentence elaborated by a deranked purpose clause, forming what we call *serial verb* construction.

2. The specific thing about purpose clauses is that they are neither complex figure nor figure-ground structures. Some alternative encoding of similar semantic relations between the two events are found in minimal structure of APP.II.1. and the coordinate complex-figure construction in APP.I.1. The latter construction is however characterized by iconicity between the two events with conjunction (‘*and*’) – not valid for APP.II.1. – in terms of tense (present or past): cf. *and says*, *and said*,

⁴¹ Speech act status of referents in APP.I.3.:

1-2/2 x HTM ... up to the wood. “I must open your mouth. Then you might speak to us.” It came to ...

HTM ... in a dream. He told me I must open your mouth . He raised the bone knife to the ...

1-3/2 x G3S She did not resist as I gently opened her mouth. The tongue and mucous membranes were ...

HYA ... ever let us get near enough to open his mouth and clean his teeth for him; with this ...

2-3/1 x H4H ... now and again a wee sugar cube. Open her mouth and just let her suck it. Give her a bit ...

3-2/1 x KBW ... somebody comes to school and opens your mouth and says ooh, this looks interesting, there ...

3-3/2 x HJE My plan was for Rick to open the mouth while I would use the forceps to retrieve ...

CEHS Somewhere, someone had opened his mouth and Gerry had paid; him, and fifty others ...

⁴² See Figure 9.1 in Croft (2001: 322).

and spoke, and called, and and sang/(I would open my mouth) and (I would) sing in the following examples:

KDJ ... frightened in case their customer opens their mouth *and* says no Mm right, this is exactly the ...

KB8 According to Jim she's never opened her mouth *and* said a single thing yet but ...

CR6 ... looked like a golden angel. She opened her mouth *and* spoke. "I meant ...

FSB ... hurt it. Then the monster opened its mouth *and* called: "Hoo-woo!" ...

H0 ... battles, vanquished many foes. He opened his mouth, *and* sang the song of the One-Eyed White ...

or asyndetically/paratactically (placing of two clauses next to each other without conjunction): *She'd opened her mouth: what about my results?*⁴³ (APP.I.2a.). They also share same subject (SS), which is typical for both structures. In comparison, there are also two ways open for the *purpose clause* and the *coordinate* (complex figure) construction with 'and' (APP.I.2.a.), to be rendered in Bulgarian: either by the conjunction 'and' or by the [*da* form]⁴⁴, the latter similar to the English infinitive but different from it in typological markedness by having affixation⁴⁵. This is however a preliminary observation as it needs corpus data to find the preferred structure of the two (not to be further discussed for now).

Another aspect of purpose clauses according to Haspelmath (in Croft 2001: 326) is that they are often used for infinitival complements, as in English. This relationship is discussed below.

➤The region between complementation and adverbial subordination is restricted to purpose clauses, however (ibid.).

Haspelmath (in Croft 2001: 326) claims that purpose clauses are semantically unlike other adverbial clauses. They share participants with the main clause which pre-determines the tense-mood of the purpose clause as 'the outcome of the purpose clause situation' and 'is typically dependent on the agent of the main clause situa-

⁴³ Other examples of coordinate structures:

and (articulate speech): *He opened his mouth and then said, "It seems to me, my lord...; you have nothing to say, don't open your mouth and prove it.; And he opened his mouth and taught them, saying, Blessed are the ...; He opens his mouth and suddenly the 'loutish threat' becomes ...;*

and (a kind of sound): *The fellow opened his mouth soundlessly and pointed back down the track...; It opened its mouth and mooed at them.;... he opened his mouth and screamed shrilly, rending up the weather-vane...; He opened his mouth and began to wail.; I would just open my mouth and sing; I've opened my mouth and I'm singing a Beatles song – which...;*

asyndetically: *Polly opened her mouth, then looked quickly away before she betrayed...; She'd opened her mouth: what about my results? (DIRECT SPEECH utterance)*

⁴⁴ E.g. go and fetch → varvi i donesi or varvi da donesesh (*върви и донеси* или *върви да донесеш* – Bg.)

⁴⁵ Affixation: a strategy for encoding the relation in major propositional acts (modifier-referent, predicate-argument), in which one element is an affix on the other (Croft 2021: Glossary of terms).

tion, that is, is controlled at least in part by the agent of the main clause situation' (Cristofaro in Croft 2001: 352). Haspelmath argues that the commonest source of infinitival complement structures are purpose clauses, also called final constructions (in Croft 2003: 352). Talmy and Reinhart (ibid.) establish a Gestalt conceptual structure for complex sentences involving adverbial subordinate clauses. Stassen (ibid.) claims that 'final constructions are cognate to C-chains (consecutive) in that both construction types imply a successive ordering between events, and, also an intimate relationship between the events in that succession (Croft 2001: 336). Purpose clauses represent a high degree of semantic integration which is absent in other adverbial clause types (Cristofaro in Croft 2001: 352). That fusion⁴⁶ is considered the final stage of grammaticalization of complements (Croft 2001: 351). These facts imply that purpose clauses are not really figure-ground structures. Instead, they possess a degree of semantic integration that is typical for the complements they grammaticalize into. The core event expressed by the main clause verb situation is incomplete without its elaboration, which speaks of a Gestalt structure as well. For that reason we name it a *serial verb* combining construction. Our observations on the syntagmatic and paradigmatic empirical facts in Table 6 are given in order to form some more general insight of the complexity of the relation between the core event and the deranked clause event.

Table 6. Diversity of deranked purpose clauses in serial voice construction

1x38	<i>to comment, to explain, to reveal, to try, to interrupt, to betray, to begin, to defend, to blister, to remonstrate, to state, to spit, to fire, to catch, to accept, to object, to draw, to do, to silence, to whimper, to list, to interject, to contradict, to cry, to offer, to confirm, to express, to eat, to lick, to produce, to shriek, to start, to utter, to accommodate, to take in , for him to see, to beg, to commence</i>	38
2x9	<i>to sing, to show, to receive, to disagree, to deny, to continue, to greet, to suggest, to refuse</i>	18
3x6	<i>to call, to demand, to yell, to ask, to answer, to let</i>	18
1x4	<i>to argue</i>	4
5x6	<i>to reply, to give, to make, to shout, to scream</i>	30
1x16	<i>to protest</i>	16
1x21	<i>to say</i>	21
1x40	<i>to speak</i>	40
Total:		192

⁴⁶ The final stage of the grammaticalization of complements to a highly generalized main verb, indicating causation, mood, or aspect (Croft 2001: 351).

Table 6 gives the paradigmatic diversity of infinitivals which includes eight groups in terms of frequency counts. In Group 1 are the verbs that are used only once (38 instances), they express a wide range of situation types, mostly to do with communicating, verbs of sound like *shriek*, synonyms like *commence* and *begin*, etc. Some transitive verbs are used with INI (indefinite null instantiation) (Croft 2003: 276), like *to comment*, *to interrupt*, *to accept*, *to object*, etc. Others have metaphorical extensions like *to try to put this fact into words*, *to fire a barbed reply*, *to commence a downright torrent of abuse*, *to silence his confession*, *to reveal her inner self*, *to utter some unthought-up excuse*, *to produce a magnificent sound*, etc. In Group 2 the infinitivals are used twice, (9 verbs x 2 = 18 instances): with INI: *to refuse/1*, *to continue/1*, *to disagree/2* and some with NNI (nonnull instantiations). Group 3 includes 6 verbs used three times (18 instances), NNI: *to demand an explanation/2*, *to demand his pound of flesh*, INI: *to yell/1*, etc. Group 4 includes only 1 verb *to argue* (4 instances). Group 5 includes 5 verbs used six times (30 instances): INI: *to reply/6*, *to shout/4*, *to scream/5*; and NNI: *to give vent to her intense anger*, *to give him a blistering answer*, *Rory opened her mouth to give him a scathing reply*, *to give him a caustic reply*, *to give him a piece of her mind at this*, *opens his mouth no longer to give assent but to yawn*; *to make an acid/cutting retort/a suitably cutting retort/3*, *to make it quite clear to her infuriating ...*, *to make a remark about the surrounding*, *to make some kind of sophisticated reply*; *to scream his anger and pain*. Group 6 – just 1 verb *to protest* (16 instances); INI/11, NNI/5: *to protest at this treatment she saw that*, *to protest at this cavalier treatment of*, *to protest again*, *to protest in exasperation*, *to protest that I was the last person in...* Group 7 includes 21 instances of *to say*: INI/Ø, NNI: *to say: Don't be stupid, you idiots*, *to say [that-CL]/3*, *to say that acclaim was all very well*, 4/*to say: "Your husband isn't in...?"*, *to say something/12*, *to say something irrelevant or personal*, *to say something else*, *to say, 'It's Doctor Rice I want to see'*, *to say [(that)] I would call a taxi for*, *to say they were with the police*, *to say more*, *to say, The Church, of course, as though he was about to say something*, etc. Interestingly, *to say* takes often complements which directly express another utterance without alteration called DIRECT SPEECH complement (Croft 2003: 322). Group 8 includes the verb *to speak* 40 times, all with INI/Ø, one exception, *to speak on this topic*.

As obvious from Table 6, the syntagmatic and paradigmatic characteristics of the deranked purpose clauses show great diversity in specifying the action in MC. They do that in numerous and various ways, opening up abundant possibilities for metaphorical extensions of meaning and introducing various metaphorically extended discourses. The infinitival modifies the whole proposition of the *open mouth* event, i.e. *open o's mouth to protest*, *to explain*, etc., hence it is felt as an obligatory part specifying the purpose of the action (see APP.II.). The *open mouth* collocation may be used literally: (Lalage was jumping up and down, *opening her mouth to catch* with complete dexterity *the pieces*); mostly used with a purposive meaning *to speak*, sometimes actualized but often not by just expressing an inten-

tion (*She opened her mouth to speak* and found she couldn't, *opened her mouth to speak*, but at that moment the door to ...; *He opened his mouth as though he was about to speak*, then spun... *As she opened her mouth to protest* he added, "Humour me." She did not protest; and *when she opened her mouth to refuse* Miguel said, "Put it like this"; *He opened his mouth as though he was about to say something*); Besides meaning an intended action, *to* may mean inarticulate sounds: (*She opened her mouth to yell*, turning to retreat into the theatre... *As she opened her mouth to shriek*, he grabbed a green towel hanging...), or motion to some spatial destination: He liked the touch, and *opened his mouth to lightly lick* the ball of the shadow's..., I split with rage, *opening my mouth to spit seeds of anger across the car*). Instances of future meaning (immediate future time reference) as in: (Alyssia opened her *mouth to give him a piece of her mind at this*), or aspectual meaning as in: (...*Fabia opened her mouth to begin and heard Ven enquire*, "So you ...; I got up and opened my mouth *to commence* a downright torrent of abuse ...; And she was *opening her mouth* to say, "It's Doctor Rice I want to see"), etc.

We move on to adverbial clauses with: *before* (see APP.V.2.a., 2.b.), *when* (see APP.V.3.a., 3b.), and *if clauses* (see APP.V.5.a., 5.b.). Two other adverbial clauses with *as*⁴⁷ (see APP.V.3.a., 3.b.), subordinator have been attested as well but are not included in the original *Hierarchy*. These express different semantic relations between the two events thus forming C-chains (consecutive): purpose < before, and S-chains (simultaneous), with typically figure-ground construal: when < as. Cf.: the examples (APP.V. 1.a., 2.a., 3.a., 4.a.):

before: (APP.V.1.a.):

H9C *Before* Corbett could open his mouth, Prince Edward came forward and took him...

JY1 ... volunteered swiftly *before* she could open her mouth. So Leith left the two of them in the kitchen ...

JY1 ... her answer *before* he so much as opened his mouth. It was all there in the lofty, superior ...

HGK ... added hotly *before* Richie could open his mouth, "Query is a hard-hitting magazine, not ...

HGK ... above her *before* she could even open her mouth. "Where do you imagine you are going ...

when: (APP. V. 2. a.):

J19 ... that what came out *when* Therese opened her mouth was a unique sound that could, if she had...

K4D ... terms of words. *When* Clifford opens his mouth a paragraph, or three, spills out, not ...

⁴⁷ Note: *as* clauses are not included in the original *Adverbial Deranking Hierarchy*, but there are attested examples in the corpus enough to be a point of discussion as expressing simultaneous temporal relations like *when*-clauses.

CK9 ... and of what you can do *when* you open your mouth. And you have once or twice, haven't you ...
 CMC ... his toes. *When* a shaman opens his mouth dozens of tiny spiders skitter ...
 FAT ... sounded dull thuds. *When* he opened his acrid mouth he displayed broken and missing teeth.

The clause with *when* is a subordinate clause (SC) and needs a main clause (MC) to complete its meaning. The *when*-clause can come before or after the main clause. *When* clauses coming before the MC are usually marked with a comma, but that is not always the case as seen in the examples below. This can be explained with the greater or lesser semantic link between the two events.

According to LDOCE, *when* is used to mention a type of event or situation when talking about what happens on occasions of that type. This is the most frequent use of the the divalent construction. When used before, *when* adverbials function as a topic marker as they “are semantically very much like conditionals with given (factual, rather than hypothetical) protases, and in many languages the two are identical in form” (Haiman, Traugott in Croft 2001: 340). It explains the figure-ground relation between the two events, in which the *when* SC is ground to the MC. Cf.:

a. what happens on occasions of the *open mouth* event type

J9C ... money would just come *whenever* you open your mouths. You are at last realizing the folly of ...

HTM ... the edges of the eyes. *When* it opened its mouth a slow drip of slime curled from the wet ...

GUK ... voice, *when* finally he deigned to open his mouth, was smooth. Thérèse jumped. The cool grey ...

KP4 ... hate it *when* you open your mouth and you say stupid things sometimes ...

GUK ... settled in a new pattern. *When* she opened her mouth they darted out, glossy and black and white ...

b. at or during the time that

HHV ... to cause more confusion *when* he opens his mouth than when he keeps it shut.

JYE ... tricky job dosing a hippo. *When* he opens his mouth, a valve closes to prevent him swallowing ...

HTM ... thorn bush from its arm. *When* it opened its mouth and yelled, Tallis recognized Morthen.

'as': (APP.V.3.a.):

HGS *As* I was about to open my mouth like a fish, the outer door swung open ...

H7W ... wagged a finger at her *as* she opened her mouth. “You said it was delicious,” he had reminded ...

JXY ... her hand in protest *as* Rachel opened her mouth – it just won't wash any more.

AD1 ... mean...” she stressed, *as* Alida opened her mouth, “on her physical health.”

The conjunction *as* indicates that something happens during the time when something else is taking place. Consider variation between MC (APP.I.1.) and subordination (sentences elaborated by a purpose clause in APP.II.1.) with *as* clauses:

MC: [circumstance]

A7A ... she held up her hand *as* Erika opened her mouth in a scandalized protest.

H94 *As* he opened his mouth in protest, she lifted her hand to stop...

Deranked *purpose clause*: [purpose]

HGV *He held up a hand as Theda opened her mouth to protest*.

if clauses: (APP.V.4.a.)

CH8 I said to him: “*If* you open your mouth, I’ll kill you!” We prepared ourselves ...

CS4 ... and bellowed: “*If* you open your big mouth again, I’ll ram this sodding box over your ...

K5J ... be told to shut up. Had he not opened his mouth, he would have been done for dumb insolence ...

CK6 ... *if* he could be bothered to open his mouth in the first place. Fruitbat and Jim ...

If clauses⁴⁸ show temporal or causal relation between the two parts of the conditional construction. Conditionals present a typical adverbial construction with a conventionalized construal. They consist of a protasis (the *if*-clause), which sets up a (hypothetical) situation, and an apodosis (the *then*-clause), which describes a consequence of the state of affairs described in the protasis (Croft 2001: 339). The examples show that protases are used initially, which seems to be also typologically the case. The *open mouth* event is used as a ground to the second event with which it is related temporally or causally in a figure-ground manner (ibid.) as is the case in the corpus examples. The fact that protasis is topical implies a backgrounding, figure-ground construction. The figure-ground conceptualization of the examples below finds explanation in diachronic and typological evidence. “The most common sources of conditional markers are temporal adverbial markers (usually *when*) [...]”. The reason is straightforward: *when* adverbials are semantically very much like conditionals with given (factual, rather than hypothetical) protases. They are considered backgrounded. The protasis is a main clause and the apodosis is an adverbial clause dependent of the protasis (Croft 2001: 340). There is a content causal relation⁴⁹ (Croft 2021: Glossary of terms) between the event of *your opening your mouth* and the other event *my killing you*. In fact, these are all speech acts with the speaker expressing threat to the hearer.

⁴⁸ See 9.2.4. *Conditionals* as a conventionalized construal (Croft 2001: 339–340).

⁴⁹ Content causal relation/construction: the semantic relation in a conditional, causal, [...] construction that expresses a causal relation between events in the world; and the construction expressing that relation. E.g. *If you press this button, the door will open*, there is a content causal relation between the event of your pressing the button and the event of the door opening (Croft 2021: Glossary of terms).

The examples in APP. V.1.b., 2.b., 3.b., and 4.b., realized by the deranked purpose adverbial clause with *before* 2, *when* 2, *as* 2, and *conditionals* 2 are not analyzed because they show analogical behaviour.

➤ **Relative Clauses after Adverbial Expressions of Time**

According to Croft (2001: 349) relative clauses are historically derived from adverbial clauses but the attested examples in the corpus show their use with expressions of time. Does that mean that they function as adverbial clauses?

This process is not exactly the case of a relative clause becoming an adverbial. Instead, a noun denoting the ground circumstances of place, time, etc. (relative to the main clause event figure) grammaticalizes into an adverbial subordinator with its own backgrounded event. (ibid.: 351)

He claims that “a conceptual compatibility of the ground function of relative clause and adverbial clause” “probably facilitates the grammaticalization process” (ibid.). Consider the ‘grammaticalized’ adverbial expressions of time attested in the corpus (no *that* complementizer is used, however) (APP.VI.).

(7) *every time*

CAF Durham gets clobbered *every time* he opens his mouth.

CBC But *every time* Marky opens his mouth he blows it.

JJH *Every time* they open their mouths, they’re there and they’re doing something ...

The *open mouth* event is used as backgrounded in relation to the other MC event, no matter whether it precedes or follows the other event. Conversely, the following example shows the *open mouth* event as figure in relation to the ‘grammaticalized’ adverbial subordinator *every time* with its own backgrounded event, cf.:

JY8 “*Every time* I think so you open your mouth and I’m forced to re-evaluate,” he returned.

While *once* introduces a clause that interrupts the other clause, cf.:

APS ... out from the talker who *once* he opens his mouth has no intention of shutting it again.

What is usually construed as a clause is now construed as a nominalized expression, i.e. nominalization. Fused relatives⁵⁰ are sometimes expressed in English asyndetically. Such clauses are called DIRECT SPEECH complements (Croft 2001: 322) or contact clauses (Minkoff 1958: 268). In Bulgarian (*every time when* → *vseki pat, kogato*), they are generally encoded by a relative pronoun having a distinct form from the *wh*-words. As to the other distinction of restrictive/non-restrictive, contact

⁵⁰ The *lay hands* collocation is used in fused relative constructions among which there is only 1 token with the adverbial expression of time (*every time*), consider the example: GW2 ... fighting the prophet, but *every time* he’d laid hands on the man, he’d changed shape, become... In the context of grammaticalization and typology studies, relative clauses are directly linked to processes like layering and discourse organizers (Hopper and Traugott in Seizova-Nankova 2016: 120).

clauses are always restrictive. Besides, all these uses serve pragmatic purposes and present different strategies of organizing the discourse. *If*-clauses serve a similar function as shown above (Seizova-Nankova 2000, 2016b: 121).

5. Conclusion

By integrating the typological perspective into the methodology more light was shed on the character of the collocation-specific argument structure constructions and on some of their typical uses describing the corpus voice continuum and the corpus complex sentence continuum. The main objective which was of making their description valid not only for intralingual comparison with the English prototype and with other body part collocations of the type, but also cross-linguistically, hopefully, has been achieved.

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APPENDICES

APP.I. Divalent reflexive construction (250 tokens, only small sample included) ...

J2T ... her eggs at birth. Later, she opens her mouth and the tiny frogs emerge. During incubation ...

J9C ... money would just come whenever you open your mouths. You are at last realizing the folly of ...

J54 ... them down again very neatly. He opened his mouth but before he could get any words out ...

J55 ... the bass tell us before he has opened his mouth that here is a man who will not fit into ...

JXY ... her hand in protest as Rachel opened her mouth – it just won't wash any more.

JYB ... the wrong place again. Kathleen opened her mouth, and a lid drooped over one of those fabulous ...

JYB OK, what next? He opened his mouth, shut it again and grinned sheepishly.

JYB ... porter grinned and winked and opened his mouth. Kath ran before he had time to air his ...

JY8 “Every time I think so you open your mouth and I'm forced to re-evaluate,” he returned ...

JY9 Ashley obediently opened her mouth. “So I'm expected to act as though ...

JY3 Why had she opened her big mouth? What had she hoped to achieve? A man like ...

JYE ... dazed by his accusation, could open her mouth, the herdsman spoke up.

JYE ... tricky job dosing a hippo. When he opens his mouth, a valve closes to prevent him swallowing ...

JY1 ... volunteered swiftly before she could open her mouth. So Leith left the two of them in the kitchen ...

JY1 ... eyeing her sardonically, he did open his mouth. “All dressed ready for your important ...

JY1 ... world of conjecture in his face, opened his mouth, and Leith thought it time to put a stop ...

JYF ... wooden and unyielding, that she opened her mouth and asked him bluntly, “Are you prepared ...

JYF She opened her mouth and was ready with her invitation that ...

APP.I.1. Main clause constructions in single sentences/90

SAP status: a., b., c.

APP.I.1.a. Declarative clauses

H0F ... I am amazed at him. I dare not open my mouth. Here in the fresh air, I cannot look at ...

H8Y ... willing to oblige.” Toby opened his mouth. It was at this point, if any, that he ...

HH9 ... his own pale hair. Oliver opened his mouth. His eyes, fixed on Mr Hellyer, had a bright ...

JY9 Ashley obediently opened her mouth. “So I’m expected to act as though ...

H94 ... she smiled in thanks. The man opened his mouth. Lucenzo let out a warning stream ...

AEB ... she looked towards Ferryman. He opened his mouth. Todger kicked him. Mother Bombie tapped ...

AEB ... to take off in a high wind. He opened his mouth like a beak. “So I say unto you ...

ACE “You’ve hardly opened your mouth , Charles dear. You can’t expect Mummy and ...

GUK Victorine opened her mouth. Thérèse jumped out of bed and hurled on ...

CAB Carrie opened her mouth. “Boys only,” he added.

G1M Not a sound. She opened her mouth experimentally. Nothing.

CEC The art dealer opened his mouth, uncomprehending. “You will do what ...

EFT The earth opened its mouth: God makes use of natural force ...

CFY He hardly opens his mouth. I think he’s got ideas about himself.’

APP.I.1.b. Imperative clauses/16

H9V ... her eyes flew open in surprise. “Open your mouth,” he ordered softly. “Why?” she croaked.

A74 They’re real pretty. “Open your mouth, Billy.” My fingers are all bandaged ...

GYD ... have a little look, open your mouth. Open your mouth. Oh let’s have a little look then, let’s ...

GYD ... big tonsils? Come on sweetheart, open your mouth. She will in a minute. Oh look...

KPL Open your mouth, did you, did you get all of that then?

KD0 ... that’s it, stir round, right, open your mouth, time it right. Mum and dad get You did ...

KB6 ... tomato and cheese. Here you are. Open your mouth. Ready? Catch.

KBW Yes? Will you sit on the chair, open your mouth, let him stick a mirror in?

KCG Michael leave it alone, open your mouth, open, come on that’s right, open again ...

KCG ... bite bite bite it, bite it, open your mouth, open, bite. How much sugar have you put ...

KCL Ah Rick! Hey open your mouth! Come on! There’s a good boy.

FRK ... shaking him in his anger and fear. “Open your mouth and say what you’ve got to say!”

FPX ... golden shower,’ she cried. “Open your mouth,” the younger man demanded.

FPX ... laugh, and a voice shout at her, "Open your mouth. You'll be getting no champagne ...

ADK ... you have nothing to say, don't open your mouth and prove it.

JY3 Why had she opened her big mouth? What had she hoped to achieve?

C9R Don't be afraid to open your mouth, the sound won't come out otherwise.

APP.I.1.c. Interrogative/2

JY3 Why had she opened her big mouth? What had she hoped to achieve?

EDJ ... time I'm thinking, What did you open your mouth for? You were a Monday to Friday till then ...

APP.I.2.a. Coordinate (complex figure) constructions with 'and'

ADR ... on top of the world, I would just open my mouth *and* sing, and not care too much about what ...

BMS I've opened my mouth *and* I'm singing a Beatles song ...

BMS Congrats on your exams, Cal. She'd opened her mouth: what about my results?

KDJ ... frightened in case their customer opens their mouth *and* says no Mm right, this is exactly the ...

KB8 According to Jim she's never opened her mouth *and* said a single thing yet but ...

CR6 ... looked like a golden angel. She opened her mouth *and* spoke.

FSB Then the monster opened its mouth *and* called: "Hoo-woo!"

CH0 ... battles, vanquished many foes. He opened his mouth, *and* sang the song of the One-Eyed White ...

APP.I.2.b. Coordinate (complex figure) constructions with 'but'

JYF ... that his eyes were gentle. She opened her mouth, *but* the word 'goodnight' wouldn't come ...

HGK ... brought Maggie back to life. She opened her mouth *but* Mitch took a tight grip on her arm ...

A0N ... waist, stopping him, he tried to open his mouth *but* his jaw-bones jammed, he was choking ...

AC4 You're not my parents. Tug opened his mouth automatically, *but* for the first time since ...

AT4 Sam was smiling. Hoomey opened his mouth, *but* found that he was speechless.

ALH ... to God. Call on Him." I opened my mouth *but* the words that came out were not mine ...

B1X Myles opened his mouth, *but* all he could utter was an unintelligible ...

EF1 His smile was chilling. She opened her mouth *but* she couldn't speak.

KCV ... just spoke French. I just didn't open my mouth, *but* I understood what they said and ...

FPX She opened her mouth, *but* spat out the sweet and sour liquid ...

FP7 ... name; how rude of me." She opened her mouth, then closed it, *but* nothing happened.

FPM ... give me strength!" Marcus opened his mouth, *but* before he could speak, Josh cut in ...

HGT ... music's very loud.' Robyn opened her mouth, *but* before she could put it to the test ...

J54 ... them down again very neatly. He opened his mouth *but* before he could get any words out ...

APP.I.2.c. *Coordinate* (complex figure) constructions based on opposites: *open/close/shut*

HGY ... blinked to accustom her eyes, opened her mouth – and *closed* it again.

H7W ... with quiet menace. Polly opened her mouth, and *closed* it again quickly. Already she ...

BP9 ... trustworthiness?" I said. She opened her mouth and *closed* it again and gave me a hard ...

GUG The steward opened his mouth then *closed* it again, seeing the Security ...

GUG ... it didn't reach?" Chen opened his mouth then *closed* it again. "Even so, there must ...

G17 ... I do not trust." Alexei opened his mouth, then *closed* it again. It was on the tip ...

G0Y Ron opened his mouth and then *closed* it again. Behind him the ...

FU6 ... is trapped and betrayed. Guil opens his mouth and *closes* it. The situation is saved ...

FSK ... nothing aloud. The small boy opened his mouth and *closed* it again. It made an interesting...

FP7 ... name; how rude of me." She opened her mouth, then *closed* it, but nothing happened.

JYB OK, what next? He opened his mouth, *shut* it again and grinned sheepishly.

CJX The Marshal opened his mouth and *shut* it again. There weren't that many ...

F99 ... brow knitting painfully. He opened his mouth, then *shut* it again. "Why," said ...

H85 ... about your methods." Salter opened his mouth, then *shut* it again. His colour was ebbing ...

H8F ... is it only me?" Jessamy opened her mouth, but then snapped it *shut* again.

APS ... out from the talker who once he opens his mouth has no intention of *shutting* it again.

APP.I.3. *Divalent non-reflexive* construction

G3S She did not resist as I gently opened her mouth. The tongue and mucous membranes were abnormally ...

HJE My plan was for Rick to open the mouth while I would use the forceps to retrieve ...

H4H ... now and again a wee sugar cube. Open her mouth and just let her suck it. Give her a bit ...

HTM ... up to the wood. "I must open your mouth. Then you might speak to us."

HTM ... in a dream. He told me I must open your mouth." He raised the bone knife to the ...

HYA ... ever let us get near enough to open his mouth and clean his teeth for him); with this ...

KBW ... somebody comes to school and opens your mouth and says ooh, this looks interesting ...

CEH Somewhere, someone had opened his mouth and Gerry had paid; him, and fifty others ...

APP.II. *Divalent reflexive* + [to-INF] (192 tokens, only a small sample included)

Complex figure sentence elaborated [by a deranked purpose clause]

JXT ... galloping uncontrollably. She opened her mouth to speak and found she couldn't.

HWE ... man, a young man. And she was opening her mouth to say, "It's Doctor Rice I want to see ...

JXX ... him further, but, even as she opened her mouth to tell him exactly what she thought of ...

JXX And then, just as Laura was opening her mouth to explain exactly why motherhood wasn't ...

JXX ... disappeared from sight, Laura was just opening her mouth to give vent to her intense anger ...

JXV Anger roared inside her and she opened her mouth to tell him in no uncertain terms where ...

JYB The man opened his mouth to comment, shrugged and went back to the ...

JY0 ... doctor had made a misake? She opened her mouth to ask her mother why he'd said that, and ...

JY9 ... Ashley declared brightly. He opened his mouth as though he was about to say something ...

JY5 ... under your spell?" She opened her mouth to give him a blistering answer, then closed ...

JY5 ... answering her implicit question. She opened her mouth to ask it again, more directly this time ...

JYA ... see for yourself." And when she opened her mouth to refuse Miguel said, "Put it like this ...

JYA ... making herself appear silly, into opening her mouth to reveal her inner self, thinking she ...

JY3 ... round to Castries." He saw her open her mouth to argue, and his eyes hardened a fraction ...

JY6 Charity opened her mouth to say that a Mercedes was really not on ...

JYE ... change the conversation, she opened her mouth to make a remark about the surrounding ...

JY1 Oddly, though, even when she opened her mouth to betray her pact with Naylor, she found ...

JYF ... time like the present, Fabia opened her mouth to begin and heard Ven *enquire*, "So you ...

JYF ... see any harm in accepting. She opened her mouth to suggest that perhaps she could give ...

JYF Fabia opened her mouth to make some kind of sophisticated reply ...

HR4 ...eighteenth-century desk as he opened his mouth to reply. "Don't say anything for ...

APP.II.1. *Minimal* structure construction elaborated [by a deranked purpose clause]

CEU ... said the Thing. Masklin opened his mouth to speak. But there were times when ...

AEB She could barely open her mouth to whimper: “Sam...” But she ...

HA3 Rincewind opened his mouth to do so. Kring hummed a warning, and agonizing ...

H94 ... provocatively as possible. She opened her mouth to speak. His head slowly tilted ...

CR6 ... blood run cold in his veins. He opened his mouth to answer. Both women were looking at him ...

FU6 He walks back to Guil. He opens his mouth to speak. Doesn't make it. A lute is heard ...

HA2 The Archdeacon opened his mouth to greet him. Dersingham looked to neither ...

HTX Then Osman understood. He opened his mouth to shout. One of Owen's Sudanis put a hand ...

APP.II.2.a. *Complex figure* sentences elaborated [by a deranked purpose clause] + 'and'

JXT ... galloping uncontrollably. She opened her mouth to speak and found she couldn't.

JY3 He saw her open her mouth to argue, and his eyes hardened a fraction ...

HTY He looked at her, opened his mouth to reply and wished that he had an answer ...

CEU ... bubbles in his head. He opened his mouth to shout at the Thing, and the walls exploded ...

JYB The man opened his mouth to comment, shrugged and went back to the ...

HGY ... could I be her niece?" When he opened his mouth, presumably to tell her, and confuse her ...

HA3 Rincewind opened his mouth to speak, thought better of it, and shut ...

A0D For a moment he glared at her, opened his mouth to deny everything, and then slumped in ...

AT4 ... close over him like death, and opened his mouth to scream, and started to drown.

ADY ... effort was so excruciating that I opened my mouth to scream and couldn't breathe enough for...

A6T He turned back towards me, opened his mouth to speak and was gone. His feet had slipped ...

AB9 Peter Yeo opened his mouth to speak, and found nothing useful to say ...

BNY It opens its mouth to scream and releases its hold.

GV8 He opened his mouth to speak and she put her hand over it.

G17 ... particularly inappropriate. He opened his mouth to make an acid retort, and then remembered ...

G17 ... loss for words. Orcadai opened his mouth to speak, and then closed it again.

G1D No one at all. Brian opened his mouth to tell his wife she was a liar and then ...

APP.II.2.b. *Complex figure* sentences elaborated [by a deranked purpose clause] + 'but'

GW3 ... she turned to her mother, opened her mouth to speak but, apparently, changed her mind ...

- B1X Father Devlin opened his mouth to say something, but Bull O'Malley raised ...
- GWG At one stage Marshall opened his mouth to interject but Wickham stopped him.
- GVP ... a white shirt, I think." Iris opened her mouth to contradict, but Melissa nudged her under ...
- JXY ... he had done in the past. She opened her mouth to try to put this fact into words, but ...
- GW3 Scales opened his mouth to say something but changed his mind.
- GWG ... keys Ruby had used. She opened her mouth to say they were with the police, but abruptly ...
- GV8 He opened his mouth to protest but she shook her head.
- GV8 He opened his mouth to speak and she put her hand over it.
- GUE ... asking himself a question. As she opened her mouth to speak, he kissed her again, and then ...
- GUX ... adjusted it gently on her brow. She opened her mouth to speak, but could not force the sounds ...
- GUU Lorton opened his mouth to speak but something in Dougal's face ...
- GUF ... momentarily exhausted. Charles opened his mouth to speak, but missed the chance.
- G0F ... reference in Goethe's Faust. He opens his mouth to tell her this, but she puts her finger ...
- G0P Donna frowned, opened her mouth to say something but was cut short.
- G3S I couldn't have felt worse. I opened my mouth to argue but he was walking away.
- G3G I opened my mouth to speak, but she forestalled me.
- EFW ... complexion tinged with lavender. He opened his mouth to speak but his words were drowned by ...
- EFJ ... light fell upon it. He opened his mouth to speak but Carrie had turned.
- KA2 She opened her mouth to speak, but Mrs Jones cut in quickly.
- CEU ...said the Thing. Masklin opened his mouth to speak. But there were times when ...
- C98 Jonna opened his mouth to speak but was stopped by his father's ...
- C98 Stephen opened his mouth to express his thanks but before he could ...
- CRE He opened his mouth to disagree, but the thought lost its way ...
- CAD ... hearing "this scruffy Welshman who opened his mouth to produce a magnificent sound" but who ...
- CAB Willie opened his mouth to speak but was interrupted by another ...
- FRS Michael Stein opened his mouth to reply but at the last minute ...
- FNY I thought he was ill. He opened his mouth to speak, but no words came out.
- FEE ... instead of irregularly your own." I opened my mouth to speak, but she silenced me.
- FSR ... invaded our country." Petion opened his mouth to speak, but the Doctor got there first ...
- FP0 Jezrael-Ayesha opened her mouth to say something but her brain gave her ...
- FP7 ... stay or run away. Twice, she opened her mouth to yell Pascoe's name, but reasoned that ...
- FPP ... strong, black, hard, and wet. She opened her mouth to call to her father, but the words blew ...

HGK ... exactly did he mean by that? She opened her mouth to demand an explanation but he simply ...

JY5 ... of command in his voice, Rory opened her mouth to give him a scathing reply, but just ...

GW2 Cleo sighed, and opened her mouth to speak, but at that moment the door ...

JY1 Leith opened her mouth to interrupt, but he went straight on without ...

JXT Her soul was bleeding. She opened her mouth to speak, but no sound came out.

JXY Angrily she opened her mouth to protest but at that moment the door ...

JY9 Startled, Ashley opened her mouth to protest, but as she did his lips parted ...

JYE ... temptation with all her strength, and opened her mouth to refuse, but no words came out.

JY4 ... now today it wasn't. Ruth opened her mouth to protest but closed it again.

JY1 ... door with an angry thud, then opened her mouth to let fly – but he got in first.

HGE ... route she can take.” Matey opened her mouth to remonstrate with him, but forbore.

HS7 ... gladly becomes exhausted and now opens his mouth no longer to give assent but to yawn ...

HHC ... alarmed to see her there, he opened his mouth to speak but Melody was quicker.

H7F Quiss opened his mouth to speak, but then thought the better of ...

HU0 Oswald opened his mouth again as if to continue but he coughed ...

H8M ... She starts for the door. Darius opens his mouth to object, but Des takes his arm and leads ...

H8J ... and Dana looked furious. She opened her mouth to speak, but Garry spoke first.

H8Y Bill Muggeridge opened his mouth to say something, but happily only bad ...

HA4 Ianthe opened her mouth to speak but she could not bring herself ...

HA9 ... realized they couldn't see her. She opened her mouth to call out to them, but no sound emerged ...

HA3 Rincewind opened his mouth to reply but felt the words huddle together ...

H97 ... was he talking about? She opened her mouth to demand an explanation, but he was swinging ...

H97 Lisa opened her mouth to silence his confession, but no sound ...

AN8 She reddened slightly and opened her mouth to speak, but they were interrupted.

BMN Corbett nodded and opened his mouth to speak but Bruce brushed him aside with ...

AN7 “Blast!” Lawler exclaimed. He opened his mouth to say something else, but before he could ...

APP.II.2.c. *Complex figure* sentences elaborated [by a deranked purpose clause] + ‘and’ + opposites:

open/close/shut

G17 ... loss for words. Orcadai opened his mouth to speak, and then *closed* it again.

JY5 ... under your spell?” She opened her mouth to give him a blistering answer, then *closed* ...

JY4 Ruth opened her mouth to protest but *closed* it again.

HA9 ... because of who I am?” She opened her mouth to answer, then *closed* it again.

APR ... stopped and frowned to himself. He opened his mouth to say more and then *closed* it again.

EVG ... to bet back in?" Patrick opened his mouth to reply and then *closed* it again. "

HA3 ... admit it, then?" Rincewind opened his mouth to speak, thought better of it, and *shut* ...

CMJ ... could it be but me?" Laura opened her mouth to say, The Church, of course, and *shut* ...

APP.III. Trivalent caused-motion construction

CDN The piece of lard opened its lipsticked mouth in a thin smile at the next arrival, and ...

FU2 The cat looked at Lyn and opened its mouth in a soundless mew.

CLK ... avoid the gaze. The soul pupa opens its mouth in a voiceless scream.

JY5 Ravenous for more, she opened her mouth to him, greedily welcoming the invasion ...

JY7 ... whispered, "Caroline, bellissima ... Open your mouth to me. Let me taste you."

JYF For herself, she'd never open her mouth to him again. But there was Cara.

APP ... face with a baton, "and I hadn't opened my mouth to him." John Ryan MP claimed to have seen ...

B1X ... think about it. He told me not to open my mouth to either of you and Una until such time ...

KCG ... what Margaret mother, she daren't open her mouth to Margaret because Margaret had copped ...

KSS ... yourself you, it's time you opened your mouth to our Michael, don't be afraid of him ...

FU4 ... heart was almost broken, but I opened not my mouth to any other.

AD9 ... without further words. Tammuz opened his mouth at Roirhak who merely took a sip of coffee ...

BMC ... English National Opera, and when he opens his mouth on this recording he may as well ...

AM6 ... creative arts, children never opened their mouths in drama lessons!) Let me hasten to say ...

HWL Sometimes you just couldn't open your mouth with those two. 'Ignore her, Angel ...

FLE Prince of Wales have actually opened their mouths up and said they're opposed to ...

ADL ... remembered that he would barely open his mouth at the 9.30 briefing before the President ...

K97 ... extraordinarily tactless thing for him to open his mouth at this stage, and say what most people ...

BNU ... the whites were showing, and opening its mouth by slipping his thumb in at the side.

APP.IV. Resultative construction

JY6 His lips compelled her to open her mouth yet *wider* beneath the command of his, to ...

HH0 ... jabs at the back of her throat, opening her mouth *wide*.

H9V “I know what I said. Now, open your mouth – not *wide!*” he reproved, giving her a ...

H9C ... except dripping black-red gums. He opened his mouth *wider*, making a strange grunting noise.

CJA Muriel tips her head back and opens her mouth *wide*. She looks as if she’s going to take ...

CDM ... showed me how to control my voice, open my mouth *wide* and sing loud or sing softly.

FP1 ... would crash down on him. He opened his mouth as *wide* as he could and yelled and yelled ...

A6J *Wider* and *wider*, the dragon was opening its mouth. He wanted her to come out. It was a scary ...

HJ9 ... lectern, and he should practise opening his mouth *wider* when talking – he was sometimes difficult ...

APP. V. Adverbial clauses

APP.V.1. ‘before’/a

J55 ... the bass tell us *before* he has opened his mouth that here is a man who will not fit into ...

JY1 ... volunteered swiftly *before* she could open her mouth. So Leith left the two of them in the kitchen ...

JY1 ... her answer *before* he so much as opened his mouth. It was all there in the lofty, superior ...

HGK ... added hotly *before* Richie could open his mouth, “Query is a hard-hitting magazine, not ...

HGK ... above her *before* she could even open her mouth. “Where do you imagine you are going ...

H8S But *before* she could open her mouth another familiar voice came floating from ...

H8M ... joined on a spring. *Before* he can open his mouth he gets a simple instruction from each ...

H8J ... his eyes, and *before* she could open her mouth she was in his arms and his mouth was on ...

HA9 ... *before* Shannon had a chance to open her mouth. Marianne laid a hand on his shoulder ...

HA3 ... it said *before* Rincewind could open his mouth. “And even if you could get a harness on ...

H9C ... receive him. *Before* Corbett could open his mouth, Prince Edward came forward and took him ...

AE0 ... she was going to say *before* she opened her mouth. We beat a retreat from the Queen Victoria ...

A68 ... of the mission, *before* Temple opened his mouth, can suppose that that President needed ...

ABS ... me to smile even *before* they open their mouths? Kate Garner’s brief was to locate the ...

A2G ... momentum of a film. *Before* Bardolph opens his mouth, for instance, he is a strange-looking ...

K8S ... haste to speak *before* the boy could open his mouth. "My lord, we should perhaps postpone ...

CKS ... have to be sure *before* you dare open your mouth, most people are going to stay quiet.

FNW ... doing physics, but *before* she could open her mouth, there came the first question.

FB0 ... cornered her, and even *before* he opened his mouth she felt the smell of fear from herself ...

FPM ... give me strength!" Marcus opened his mouth, but *before* he could speak, Josh cut in ...

APP.V.1. '*before*'/b

C98 Stephen opened his mouth to express his thanks but *before* he could ...

AN7 "Blast!" Lawler exclaimed. He opened his mouth to say something else, but *before* he could ...

APP.V.2. '*when*'/a

J9C ... money would just come *whenever* you open your mouths. You are at last realizing the folly of ...

JYE ... tricky job dosing a hippo. *When* he opens his mouth, a valve closes to prevent him swallowing ...

HTM ... thorn bush from its arm. *When-* it opened its mouth and yelled, Tallis recognized Morthen.

HTM ... the edges of the eyes. *When* it opened its mouth a slow drip of slime curled from the wet ...

HHV ... to cause more confusion *when* he opens his mouth than when he keeps it shut. Mr. MacGregor ...

GUK ... voice, *when* finally he deigned to open his mouth, was smooth. Thérèse jumped. The cool grey ...

GUK ... settled in a new pattern. *When* she opened her mouth they darted out, glossy and black and white ...

KP4 ... hate it *when* you open your mouth and you say stupid things sometimes ...

K4D ... terms of words. *When* Clifford opens his mouth a paragraph, or three, spills out, not ...

CK9 ... and of what you can do *when* you open your mouth. And you have once or twice, haven't you ...

CMC ... his toes. *When* a shaman opens his mouth dozens of tiny spiders skitter between ...

FAT ... sounded dull thuds. *When* he opened his acrid mouth he displayed broken and missing teeth.

FAP ... that frying grease all day. Only opens his mouth *when* essential...

J19 ...that what came out *when* Therese opened her mouth was a unique sound that could ...

APP.V.2. 'when'/b

JYA And *when* she opened her mouth to refuse Miguel said, "Put it like this ...

JY1 Oddly, though, even *when* she opened her mouth to betray her pact with Naylor, she found ...

HGE ... wait," he continued, *when* she opened her mouth to speak again. "Think. Since you seem ...

HH1 ... wall at her back. And *when* she opened her mouth to protest at this treatment she saw that ...

H8M ... hardly noticing I was there. *When* I opened my mouth to protest, I was like a goldfish blowing ...

APR ... artist had said. *When* I opened my mouth to speak on this topic it was as though ...

GUK ... could not see into. *When* she opened her mouth to shout, darkness filled it, a black biscuit ...

EVG ... looked across at Michael Lee. She opened her mouth to say something, *when* there was a knock ...

FS8 ... they muscled through. *When* she opened her mouth to yell, a hand caught her face, pinching ...

FPX He was about to open his mouth to demand his pound of flesh *when* the door ...

APP.V.3. 'as'/a

HGS *As* I was about to open my mouth like a fish, the outer door swung open ...

H7W ... wagged a finger at her *as* she opened her mouth. "You said it was delicious," he had reminded ...

JXY ... her hand in protest *as* Rachel opened her mouth – it just won't wash any more.

H94 *As* he opened his mouth in protest, she lifted her hand to stop ...

AD1 ... mean..." she stressed, *as* Alida opened her mouth, "on her physical health."

A7A ... she held up her hand *as* Erika opened her mouth in a scandalized protest.

K8T That evening Charlie hardly opened his mouth *as* he listened to the different accents ...

CKD ... nephew and so long *as* you don't open your mouth, it should be all right." Hari took ...

CK0 I kicked his ankle *as* he opened his mouth. I said, "Yes, Mr Leland," and hurried ...

CJA ... next as soon *as* he opened his little purple mouth.

CJA Then, just *as* Tabitha was opening her mouth and wondering what she was supposed to ...

CG3 ... commas, which open *as* the character opens his mouth and close as he closes it.

APP.V.3. 'as'/b

JXX ... him further, but, even *as* she opened her mouth to tell him exactly what she thought of ...

JXX And then, just *as* Laura was opening her mouth to explain exactly why motherhood wasn't ...

HR4 ... eighteenth-century desk *as* he opened his mouth to reply. "Don't say anything for ...

HGV He held up a hand *as* Theda opened her mouth to protest. “The household expenses may ...

HGK ... the air,” he added just *as* she opened her mouth to give him a caustic reply.

HGK ... deny anything,” he added *as* she opened her mouth to speak. “I know Devlin a little better ...

H7W ... misfortune to meet. *As* he opened his mouth to reply he was interrupted by a polite ...

H7W “Nathan, please.” *As* she opened her mouth to protest he added, “Humour me.” And despite ...

H8S ... subsequent scene. But *as* she opened her mouth to suggest it, she gave herself a mental ...

H8S He held up his hand *as* she opened her mouth to protest. “No, don’t argue. Quite apart ...

H8S But, *as* she opened her mouth to accept, Folly suddenly realised that ...

HA9 ... the truth – but, even *as* she opened her mouth to tell him so, some deep-down instinct ...

AB9 ... diffident but resolute, and *as* Morgan opened his mouth to protest in exasperation the doorbell ...

GUE ... asking himself a question. *As* she opened her mouth to speak, he kissed her again, and then ...

ECK ... held up his finger *as* Richter opened his mouth to speak. “I know, you’ve already learnt ...

CA0 ... her out a second time. *As* she opened her mouth to shriek, he grabbed a green towel hanging ...

C8E ... gone crazy, because just *as* Dad opened his mouth to start talking ...

FAB *As* Kate opened her mouth to answer, the phone on her desk rang.

FAB *As* she opened her mouth to speak there was a knock on the door.

APP.V.4. Conditionals (if clauses)/a

HR8 ... information on him. Anyway, *if* he opened his mouth again, he thought glumly as he started ...

HHX ... experience of him suggests that *if* he opens his mouth in Ashfield, we shall hear him down here ...

K5J ... be told to shut up. Had he not opened his mouth, he would have been done for dumb insolence ...

CK6 ... sure, *if* he could be bothered to open his mouth in the first place. Fruitbat and Jim Bob ...

CH8 I said to him: “*If* you open your mouth, I’ll kill you!” We prepared ourselves ...

CS4 ... and bellowed: “*If* you open your big mouth again, I’ll ram this sodding box over your ...

H97 ... trust herself to answer him. *If* I open my mouth, I’ll end up screaming, she was thinking ...

HHX ... experience of him suggests that *if* he opens his mouth in Ashfield, we shall hear him down here ...

K5J ... be told to shut up. Had he not opened his mouth, he would have been done for dumb insolence ...

EDJ ... this morning. *If* only he hadn't opened his mouth. When he walked in I thought ...

APP.V.4. *Conditionals (if clauses)/b*

H9N ... ruthless young face. I think if I'd opened my mouth to say something irrelevant or personal ...

APP.VI. *Relative clauses with ground noun 'time'*

JJH ... run isn't it? *Every time* they open their mouths, they're there and they're doing something ...

HR8 ... you and sobbing *every time* you open your mouth. He wasn't yet quite in the Michael Jackson ...

HGY ... thought tiredly; *every time* she opened her mouth, she got deeper and deeper into the mire ...

CAF Durham gets clobbered *every time* he opens his mouth. Yet no one walked out of the big top ...

CBC But *every time* Marky opens his mouth, he blows it. If it's something funky ...

JY8 ` *Every time* I think so you open your mouth and I'm forced to re-evaluate," he returned ...

GUK Léonie tried, but *each time* she opened her mouth an invisible hand blocked it and shut her ...

ECU *From the moment* he opened his mouth the pub was in uproar. Years later ...

CBG *The only time* Nick Faldo opens his mouth is to change feet.

FU7 ... and said, "*Next time* he tries, open your mouth." It was exceedingly confusing.

APS ... out from the talker who *once* he opens his mouth has no intention of shutting it again.