

データ駆動型学習を見据えた

英語の倒置表現の探索および実例データ集積の試み

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発表の内容

- 1 はじめに(少し長めの背景説明)
 - □ なぜ倒置表現か?
 - ロ なぜData-driven-learning (データ駆動型学習)か?
- 2 倒置表現テキスト
 - ロ 対象とする「倒置」表現
 - ロ COCAの利用 (subject-auxiliary inversion)
 - ロ データ集積 (subject-dependent inversion)
- 3 今後の予定・目標

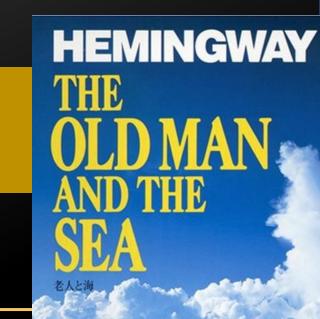
1 はじめに

1. 背景: なぜ倒置表現?

2020年度前期

- 14週すべてオンライン授業 (Microsoft Teams 利用)
- 履修人数:約40人 (× 2クラス)
- 双方向性あり
- データ・ダイエット要請のため、パワポ画面を提示。

副教材/授業外学修の課題: みんなで『老人と海』を読んでみよう



1. 背景: なぜ倒置表現?

Project Gutenberg からテキストをダウンロードし、エクセルに1文ごとに貼り付けた。そのファイルを全員で共有し、担当となった英文に文の構造がわかるような日本語訳をつける。

ATALA	Dut it I cat fill fresh enough ne won't be bau.	しょし、「カドキャーを区(イーノ)で見ったり、心へはなくだり)0
022S	I wish a flying fish would come on board tonight.	今夜トビウオが船に来たら良いのに。
024F	But I have no light to attract them.	しかし、私は彼らを引き寄せる光を持ってはいない。
030X	A flying fish is excellent to eat raw and I would not have to cut him up.	トビウオはサービー・アンドル・アンドル・アン・アン・アン・アン・アン・アン・アン・アン・アン・アン・アン・アン・アン・
036G	I must save all my strength now.	Hemingway を読めた
037Y	Christ, I did not know he was see him.	
040N	"I'll kill him though" サンティアゴのつぶやき	のがよかった
044L	in all his giv	「すば <mark>」</mark>
055T	Although にふつうとは語の並びが	それは理にかなっていないながら彼は思った。
056N	But I will	しかし私は男の人ができることと耐えることを彼に教えよう。
059S	"I told the 違うもの があり、気に	「少年に自分はおかしな老人だと伝えたことがあった」彼は言った。
060T	"Now is when なっている。	今がそれを証明する時だ
067X	The thousand time.	それが無意味だと彼が証明してきた千回
068R	Now he was proving it again.	今彼は、それを再び立証しようとしていた。
076T	Each time was a new time and he never thought about the past when he was doing it.	一回一回が新しい時で、彼は行動するときは過去について一度も考えたことは無かった。
001F	I wish he'd sleep and I could sleep and dream about the lions, he thought.	奴が眠ってくれたらと私は望む、そして私も眠ることができて、ライオンの夢を見られる。
014Y	Why are the lions the main thing that is left? Don't think, old man, he said to himself.	なぜライオンは残った主なものだったのだろう。考えるな、老人。彼は自分自身に言い聞か
018X	Rest gently now against the wood and think of nothing.	今、落ち着いて木にもたれかかって休み、何も考えていない。
020S	He is working.	彼は動いている。
024R	Work as little as you can.	できるだけ働かないで

1. 背景: なぜ倒置表現?

009N	"If the fish decides to stay another night I will need to eat again and the water is low
013T	I don't think I can get anything but a dolphin here.
014N	But if I eat him fresh enough he won't be bad.
)22S	I wish a flying fish would come on board tonight.
024F	But I have no light to all
)30X	A flying LL X . — . T — " C — X X I i i i i i
036G	サンティアゴのつぶやき
037	にふつうとは語の並びが
037 04 04	
)4	違うもの があり,気に 』
055T	
056N	Bur なっている。
059S	"I told the boy
060T	"Now is when I must prove it."
067X	The thousand times that he had proved it meant nothing.
068R	Now he was proving it again.
076T	Each time was a new time and he never thought about the past when he was doin
001F	I wish he'd sleep and I could sleep and dream about the lions, he thought.
014Y	Why are the lions the main thing that is left? Don't think, old man, he said to hims
018X	Rest gently now against the wood and think of nothing.
020S	He is working.
024R	Work as little as you can.

「もし魚がもう一夜とどまることを決めたなら、私は再び食事をとる必要があ 私(老人)はシイラ以外はここで釣れるとは思わない。

But he seems calm, he thought, and following his plan.
But what is his plan, he thought.
And what is mine?

Mine I must improvise to his because of his great size. If he will jump I can kill him.

今、落ち着いて木にもたれかかって休み、何も考えていない。

彼は動いている。

できるだけ働かないで

気づきを拾えなかったという後悔 → 本日の発表

in the bottle.

DDL(データ駆動型学習)ってなに?

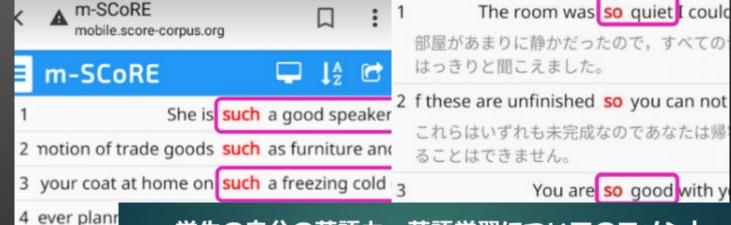
まずは典型的な DDL。 のちほどDDLが 多様であること を説明します

DDL (Data Driven Learning)

- ▶ Corpus;
- ▶ Concordance;
- ▶ keyword-in-context (KWIC)

教師の利点

- 「教科書や辞書に書いてあるから○○である」ではなく, コンコーダンスラインから見出されるルールは教科書や辞書の例文にも共通だというボトムアップ的アプローチョン 納得感が高い
- 英語で英語を教える場合,適切な例文が5,6例以上あるのは心強い
- 対話型の授業になりやすい (知識ではなく,何が見えるか?何に気づく?)
- 自分のアタマで考えてもらえる
- 授業中に英文をしっかり読んでもらえる



学生の自分の英語力・英語学習についてのコメント

授業前

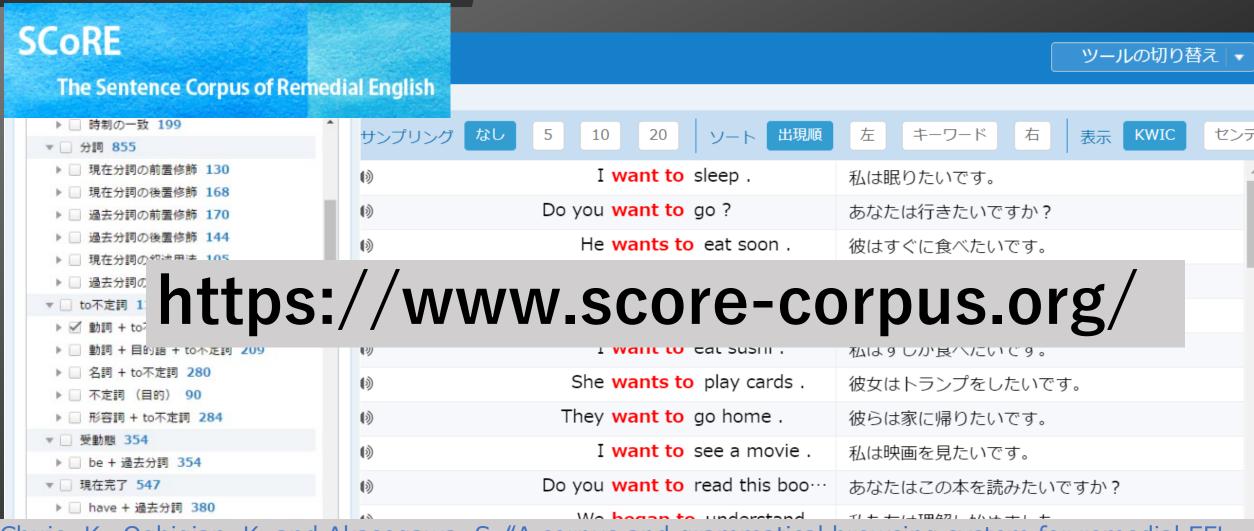
「知らならい単語の数が多い」etc.

授業後

「語順が大事ということが分かった」

「避けてきた文法も大事だということがわかった」(2018年度春集中講義)

「単語の品詞や使い方を考えなくてはいけない」 (2018年度後期)



Chujo, K., Oghigian, K. and Akasegawa, S. "A corpus and grammatical browsing system for remedial EFL learners," In A. Leńko-Szymańska and A. Boulton (eds.), Multiple Affordances of Language Corpora for Data-driven Learning. Amsterdam: John Benjamins, 2015, 109-128.



Tim Johns (1936-2009)

https://lexically.net/TimJohns/

image if not in usage by a whole population which appropriates them as a 2 anxiety that has emerged among a population which associates years of r 3 fferings of the elderly infertile population, which craves nothing so mu 4 nd the weary inertia of the human population, which has been depleted by 5 ission defines the target student population, which has grown from 6,500 south-eastern countryside of its population, which has retreated from i 7 ious effect on the overall prison population which has risen dramaticall world community faces: a growing population which has outstripped resource. 9 mate number of Luxembourgers in a population which has swelled close to 10 d to happen. That fraction of the population which has even noticed appear 11 e out in the overcrowded civilian population, which in the main was pove 12 y multi-racial area with a school population which is one-half black, ar 13 try, where the 40 per cent of the population which is ethnic Russian is 14 red with the UK. An ageing French population, which is concerned about p 15 experts. Theoretically, the local population, which is mainly Tibetan, s 16 nt and 40 per cent of Macedonia's population, which is becoming increasi 17 69th Parallel, speaks for a local population which knows only central he 18 enix, Arizona, producing a viable population which was then reintroduced

19 ned is not the military. It's the population who are angry.' He went on, 20 ith a hungry, angry and desperate population who are furious at the doub 21 port among the 55 per cent of the population who are of mixed race (Colo 22 figures - the 4.3 per cent of the population who are full-time veggies at 23 t the estimated 3 per cent of the population who are dysthymic - and the 24 mi-gods by the 90 per cent of the population who are "bantu peasants ... 25 ng nation in the world contains a population who are not capable of deci 26 value for the 94 per cent of the population who are basic rate taxpayer 27 been heard by 15 per cent of the population who are seriously obese. But 28 -fifth minority of Britain's male population who are only just beginning 29 belong to the 40 per cent of the population who do not even enjoy a for 30 fe. For the 80-90 per cent of the population who don't speak Standard En 31 own members of the minority Tutsi population who have escaped the militi 32 s of the bottom two-thirds of the population who now live in households

DDL (data-driven learning) variations

View point	Possible dimensions and continuums								
	Hard DDL	<-	>	Soft DDL					
Corpus data	Authentic	<-	->	Simplified					
Corpus size	Large	<-	->	Specific					
Corpus purpose	General	<-	->	Specific					
Concordancer	Web/Lobal computer	<-	->	Paper-based					
Language	Monolingual		->	Bilingual					
Task	Divergent (No definite answers)	<-	->	Convergent (Definite answers)					
Activity	Student-centered	<-	->	Teacher-led					
Instruction	Inductive (Implicit)	<-	->	Deductive (Explicit)					
Situation	Outside classroom	<-	->	In classroom					
Grouping	Individual	<-	->	Pair/Group					

(Mizumoto & Chujyo, 2016)

留意点

- ▶ 授業実践においては「どんな設問をするか」が大事。(『仲間外れの用 法探し』や『同じ構文探し』は取り組みやすい。)
- ▶ 授業実践において、文法構造を発見させるのであれば、学習者のレベルに合ったコーパスを用いたほうがよい。
- → コーパスから提示したい文を引き出せないことがある。提示したくない文を引き出してしまうことがある。e.g. 検索キーワードだけで自動詞文と他動詞文をきれいに分けて提示させることは簡単ではない。
- ► 語学学習ツールとしてコーパス利用が有用である(のであって、万能ではない。)

2 倒置表現テキスト

❖ Subject-auxiliary inversion (主語・助動詞倒置)

e.g. Not one of them did he found useful. [initial negative constituents] / Had he seen the incident he'd have reported it to the police. [Conditional inversion] [計9タイプ]

❖ Subject-dependent inversion (主語・依存要素倒置)

e.g. Up in my room, on the nightstand, is a pinkishreddish envelope that has to go out immediately.

Huddleston and Pullum (2002)

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Huddleston and Pullum (2002)

- ❖ Subject-auxiliary inversion (主語・助動詞倒置)
 - a) 閉じた疑問文
 - e.g. Can she speak French?

挙げている用例は,特に明記していないもの以外はHuddleston and Pullum (2002) より引用

- b) 開かれた疑問文
 - e.g. And where did you go after that?

→ 今回,対象としたい特殊構文的な倒置ではないため対象外。

- ❖ Subject-auxiliary inversion (主語・助動詞倒置)
 - c) 感嘆文
 - e.g. What a fool have I been! How hard did she try!

しかし通常語順のほうが圧倒的に多い

→ よって、対象外。

- ❖ Subject-auxiliary inversion (主語・助動詞倒置) d) 否定要素の前置
 - e.g. Nowhere does he mention my book.
 - Never have I had such a strong fish nor one who acted so strangely. (The Oldman and the Sea)

COCA の基本的な使い方は 「研究社WEBマガジント 「COCA」で検索して出て くる記事を参照ください。

[. never|nowhere|no_vb]

. never nowhere no _vd_

[. never|nowhere|no vd]

(文頭に否定の構成素 + be動詞)

(文頭に否定の構成素 + do | did | does)

(文頭に否定の構成素 + has|have|had)

対象外データも表示されるので、目視の確認が必要。 (以降すべて同様)

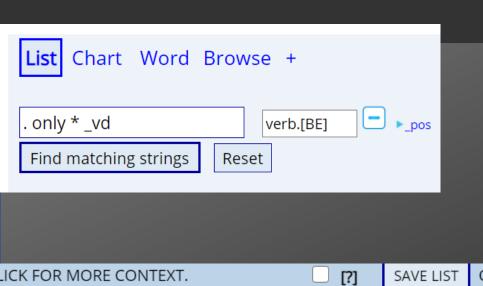
❖ Subject-auxiliary inversion (主語・助動詞倒置)d) 否定要素の前置 (Initial negative constituents)

in its later seasons, but many of its best sparring matches were verbal . Nowhere is this exemplified better than in Olenna Tyrell (Diana R 前頁での検索式を入力し " and vitness that trajectory firsthand . **Nowhere is** this alarming trend felt more urgently, however, th て出力されたCOCA の rem from their historical community . **Nowhere is** this alienation more clearly expressed than in an コンコーダンス submerged in liquid and sen. # As in recent years, bacon is king . Nowhere is that more evident than the five-pound barbecue pig leg, ba sometimes hope is rewarded, and good things happen to people who deserve them . Nowhere is this clearer than in its supernatural for that some of Burstein's interview subjects still seem to be on his payroll . Nowhere is that truer than in the sequence that leads to the po , but it's also the force that constantly makes words and expressions obsolete . Nowhere is this more obvious than in compilations of loc lower-class) citizens, a kind of dumping ground for outcasts of various backgrounds . Nowhere is the source of this perception more clea themselves influenced by Magna Carta) of the early colonies in the 17th century . Nowhere is the drafter's debt more discernible than in " approach in which it uses the West's own openness as a weapon . Nowhere is the new approach felt more keenly than the Baltic states, that make our lives more convenient often tend to make our lives less secure . Nowhere is there a better example of that problematic tra

❖ Subject-auxiliary inversion (主語・助動詞倒置) e) Onlyの前置 e.g. Only two of them did he find useful.

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「. only * _vd 」(文頭にonly +何か+do|did|does)
「. only * * _vd 」(文頭にonly+何か+何か+do|did|does)
「. only * _vh 」(文頭にonly +何か+has|have|had)
```

対象外データもたくさん表示される。



New England Review

2016 NEWS Omaha World-Herald

VirginiaQRev

2017 FIC

2015 FIC

A B C

A B C

A B C

HELP		ALL FORMS (SAMPLE): 100 200 500	FREQ	TOTAL 1,221 UNIQUE 161 +	
1		. ONLY THEN DID	346		
2		. ONLY LATER DID	106		
3		. ONLY ONCE DID	57		
4		. ONLY THEN DOES	50		
5		. ONLY I DO	45		
6		. ONLY THEN DO	45		
7		. ONLY I DID	44		
HOOS	E LIS	CREATE NEW LIS	Т	[?]	

her cheeks. She snapped the case shut and dropped it into the bag . Only then did she lift her coffee and take the first for

happens. " # Once the Brilliant was filled, it headed to Cherbourg . Only then did authorities at the port learn what had ha

Something else. " Hannah flexed her wrist slightly, and Louisa released her . Only then did Hannah look up. " Truth be tol

2019	FIC	MassachRev	Α	В	С	, surprised at how small and vulnerable she looked sitting in her kitchen chair . Only then did I notice her left eye drifting,
2019	FIC	Analog	Α	В	С	# Outside the tower room, Valencia conducted Carducci down to the ground floor . Only then did he find himself able to
2018	FIC	SciFl & Fantasy	Α	В	С	rational brain refused to believe any of the past few days had been real . Only then did I speak again to the major. # " It's
2018	FIC	NewYorker	Α	В	С	's daughter. # Jiayu's grandfather had died when she was in college . Only then did she learn that he had had a wife before
2018	NEWS	The Boston Globe	Α	В	С	was. By the time I got close, someone else had killed him . Only then did I realize he was part of a little squad of my team
2017	FIC	Bk:PatternArtist	Α	В	С	's part, the dress was put on and the hooks and eyes secured . Only then did she let out the breath, hesitate a moment, a
2017	FIC	Bk:ChristmasOnMyMind	Α	В	С	legs. At least it was worth a try. # Jess turned around . Only then did she see the big, tan SUV that had pulled up a dozen
2017	FIC	Analog	Α	В	С	visitors. They hoped to protect the Bodleian from damage seen at other libraries . Only then did I begin to think. Only the

ON C	ON CLICK: CONTEXT TRANSLATE (??) G GOOGLE IMAGE PRON/VIDEO BOOK (HELP)											
HELP			ALL	BLOG	WEB-GENL	TV/MOVIES	SPOKEN	FICTION	MAGAZINE	NEWSPAPER	ACADEMIC	1990-1994
1		. ONLY THEN DID	346	11	22	4	8	232	37	18	14	54
2		. ONLY LATER DID	106	9	7	1	5	30	30	12	12	15
3		. ONLY ONCE DID	57	4	2	1		22	7	12	9	13
4		. ONLY THEN DOES	50	3	8	1		18	10	2	8	9
5		. ONLY I DO	45	3	1	24		15		1	1	6
6		. ONLY I DID	44	2	1	14		26	1			6
7		. ONLY THEN DO	45	2	8	3	1	13	9	4	5	7
8		. ONLY NOW DID	37	1				35	1			8
9		. ONLY HE DID	32			11	1	20				4
10		. ONLY NOW DO	25	1	2	3		11	4	3	1	3
11		. ONLY SHE DID	20			4		16				1
12		. ONLY RECENTLY DID	20	2	2	1	2	4	3	5	1	3
13		. ONLY IT DID	16	1	1	6		7	1			2
14		. ONLY YOU DO	16	2		6	1	3	3	1		2
15		ONLY RARFLY DOES	15	1	2	1		2	2	2	4	3

- 参 Subject-auxiliary inversion (主語・助動詞倒置)
 - f) so/suchの前置
 - e.g. So little time did we have that we had to cut corners.
 - Such a fuss would he make that we'd all agree.
 - "You're feeling it now, fish," he said. "And so, God knows, am I." (The Oldman and the Sea)
 - 「. so ADJ _vb」(文頭のso+形容詞+ be動詞)
 「. so ADJ _vh 」(否定の構成素+has|have|had)
 「. such a|an NOUN _vm」(否定の構成素+has|have|had)
 「. such a|an NOUN _vb」「. such a|an NOUN _vd」「. such a|an NOUN vh」

- ❖ Subject-auxiliary inversion (主語・助動詞倒置)
 - g) その他の要素の前置

e.g.

- Tourism will continue to grow ... <u>Particularly</u> is this the case in Queensland, ...
- Thus had they parted the previous evening.

→ 要素が特定できないので、コーパスで検索しづらい。とりあえず今回の COCA利用では対象外。

- ❖ Subject-auxiliary inversion (主語・助動詞倒置)h) 条件節の倒置
 - e.g. <u>Had he seen the incident</u> he'd have reported it to the police.

「. had PRON VERB」(文頭のso+形容詞+ be動詞)

- ❖ Subject-auxiliary inversion (主語・助動詞倒置)
 - i) 祈願の*may*
 - e.g. *May you be forgiven.*
 - May the best man win!

| nay you|he|she|they| (文頭のmay+形容詞+ be動詞)

❖ Subject-auxiliary inversion (主語・助動詞倒置)

e.g. Not one of them did he found useful. [initial negative constituents] / Had he seen the incident he'd have reported it to the police. [Conditional inversion] [計9夕イプ]

❖ Subject-dependent inversion (主語・依存要素倒置)

e.g. George can you do me a favour? Up in my room, on the nightstand, is a pinkish-reddish envelope that has to go out immediately.

Huddleston and Pullum (2002)

❖ Subject-dependent inversion (主語・依存要素倒置) a) 比較構文での倒置

e.g. Spain's financial problems were less acute than [had been those of Portugal].

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「than _vb」(than + be動詞)
「than _vh」(than + have|has|had)
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- ❖ Subject-dependent inversion (主語・依存要素倒置)
 - b) 報告動詞の倒置
 - e.g. The best solution, suggested <u>Pat</u>, would be to instal a security alarm system.

SUGGEST NOUN SAY NOUN

見つけられないわけではないが、目視で「省略」と分別する必要がある

- ❖ Subject-dependent inversion (主語・依存要素倒置)
 - c) 前置詞句の倒置
 - e.g. George, can you do me a favour? <u>Up in my room</u>, <u>on the nightstand</u>, is a pinkish-reddish envelope that has to go out immediately.

「. PREP the NOUN _vb」(文頭の前置詞+the 名詞+be動詞) be動詞以外を用いる前置詞句の倒置もあるが,抽出困難。

- ❖ Subject-dependent inversion (主語・依存要素倒置)
 - d) 形容詞句の倒置
 - e.g. Immediately recognisable here is the basic, profoundly false tenet of Movie Philosophy 101, as it has been handed down from "Antie Mame" and "Harold and Maude"; ...
 - 「. ADJ _vb」(文頭の形容詞+be動詞) 「. SURE WAS」 「. TYPICAL IS」 「. RARE IS」...

- ❖ Subject-dependent inversion (主語・依存要素倒置)e) 動詞句内の倒置
 - e.g. <u>Arrested</u> were Nathan Johnson, 23, of New York, and his brother, Victor Johson, 32, a 15 year Army veteran.

「._v?n_vb」(文頭の過去分詞+be動詞)

- ❖ Subject-dependent inversion (主語・依存要素倒置)
 - f) 動詞句の倒置
 - e.g. This jacket and cap will keep you warm throughout the chilly autumn days. The jacket is made of a particularly heavy brushed denim, with rivets at the pockets and a brown suede collar.

 [Complementing the jacket is the cap, crafted of the same denim and featuring a brown suede visor.]

なかなか抽出できない。

- ❖ Subject-dependent inversion (主語・依存要素倒置)q) 名詞句の倒置
 - e.g. She's a nice woman, isn't she. [<u>Also a nice</u> woman is our guest] ...
 - But he seems calm, he thought, and following his plan. But what is his plan, he thought. And what is mine? [Mine I must improvise to his because of his great size.] If he will jump I can kill him. (The Oldman and the Sea)

なかなか抽出できない

簡単にまとめると:

COCAにおける簡単な検索式では,

- ・ 全体としては「主語・依存要素倒置」よりも「主語・助 動詞倒置」タイプの倒置表現を抽出するのがむずかしい。
- 抽出するのが最も難しいのは,名詞句や動名詞句が倒置する文であり,COCAにおける単純な位置と品詞指定ではなかなかヒットしない。
- 文頭にonlyが位置し倒置する文や形容詞句の倒置文の出現回数も多くはない。

3 今後の予定・目標

COCA利用では

- 学習者が自分自身でパソコンを操作し、検索し、例文観察 をするということは想定できるが...
- ・ 主語・依存要素倒置の場所句以外(特に名詞句)の倒置が COCAのコーパスの検索式のみでは抽出しにくい。
- 語数に制限をかけた検索式であり、典型例であるかどうか はまったく不明。

COCAの簡単な検索式で抽出しづらい倒置文を収集するために

- COCA (fictionのセクション) 等のコーパスをダウンロードし正規表現で抽出(夏までの宿題)。
- 見つけたらコツコツとメモを取る。
- (倒置表現には情報構造が大きくかかわるのと,学習者に提示する ことを考えると,母語話者の内省を利用した作例は困難。)

COCA以外で見つけた実例の一部

Harder still than understanding the significance of such barbarism may be accepting that it can never be completely prevented. https://languagelog.ldc.upenn.edu/nll/?p=2400

While we can't predict which of today's barbarisms will go the way of slave auctions and autos-da-fe, heading that way are capital punishment, the criminalization of homosexuality, and male-only suffrage and education.

(Pinker (2018) Enlightenment Now)

Wolcott Gibbs が1936年に *The New Yorker* で *Time* 紙による主語・依存要素の倒置の使いすぎをからかっているらしい。(未調査)

- 倒置表現は通常語順ではないが「奇妙」でもないことを、学習者にデータ を伴って示したい。
- (学習者のレベルを考慮した上で)どういった場合に倒置表現が使えるのかというルール(語用論・情報構造上の制約)の発見教材として使えるかもしない。
- 著作権をクリアしている(=引用) と判断されるか,あるいは,諸条件を満たす提示方法があるのであれば,公開したい。(授業利用限定のみということであると公開は可能??)

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Huddleston, R and Pullum, G. K. (2002) The Cambridge Grammar of the English Language, the Cambridge University Press.

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- COCA (Corpus of Contemporary American English) https://www.english-corpora.org/coca/
- SCoRE (The Sentence Corpus of Remedial English) https://www.score-corpus.org/
- Tim Johns' Kibbitzers
 https://lexically.net/TimJohns/
- Project Gutenberg https://www.gutenberg.org/

ありがとうございました

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