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The truth about "it is true that…"

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Deflationism, one of the influential philosophical doctrines of truth, holds that there is no property of truth, and that overt uses of the predicate "true" are redundant. However, the hypothetical examples used by theorists to exemplify deflationism are isolated sentences, offering little to examine what the predicate adds to meaning within context. We oppose the theory not on philosophical but on empirical grounds. We collect 7,610 occurrences of "it is true that" from 10 influential periodicals published in the United States. We classify and annotate these with respect to the positions of coordinating and subordinating conjunctions that they contain. This way we investigate the contextual relationships between the proposition following "it is true that" with its surroundings. Overall, 34 different syntactical patterns are encountered. In some occurrences of "true", the predicate acts in the same manner as a performative verb does. These occurrences, having been observed in linguistically reliable media, constitute pragmatic counter-examples to deflationism.

Keywords: context, corpora, deflationism, pragmatics, semantics, truth

1. Introduction

Frege (1956) famously claimed that discovering truth is the aim of all sciences. Today one can find numerous philosophical monographs and edited volumes focusing primarily on theories of truth (Blackburn, 2013; Glanzberg, 2013). A couple of years ago, in celebration of the 125th year of its *Proceedings*, The Aristotelian Society organized an online conference (Longworth, 2013). This was a weeklong event featuring a classic paper each day from their back catalogue. Seven landmark contributions were featured (reprinted), each accompanied by commentary by a contemporary analytic philosopher. The commentaries show that most of the issues raised in the groundbreaking works are still being debated.

In this paper, we take issue with one of the influential theories, the deflationary theory of truth (deflationism, in short). Deflationists take their cue from an equivalence thesis (Ramsey, 1927):

> The statement "φ is true" has the same meaning as φ,

viz. asserting that a statement is true is just asserting the statement itself (Stoljar and Damnjanovic, 2012). Thus, deflationism is typically characterized as the view that truth has no nature: the predicate "true" does not signify a robust property.

Early versions of the theory can be found in Frege, Ramsey, and Ayer:

> It is worthy of notice that the sentence "I smell the scent of violets" has the same content as the sentence "it is true that I smell the scent of violets". So it seems, then, that nothing is added to the thought by my ascribing to it the property of truth. (Frege, 1956)

> [I]t is evident that "It is true that Caesar was murdered" means no more than that Caesar was murdered, and "It is false that Caesar was murdered" means no more than Caesar was not murdered. (Ramsey, 1927)

> If I say that it is true that Shakespeare wrote Hamlet, or that the proposition "Shakespeare wrote Hamlet" is true, I am saying no more than that Shakespeare wrote Hamlet. Similarly, if I say that it is false that Shakespeare wrote the Iliad, I am saying no more than that Shakespeare did not write the Iliad. (Ayer, 1935)

Our goal is to investigate contextual relations of "it is true that" with its immediate surroundings (co-text) in actual (not hypothetical) examples. To wit,

> [Russell and his followers'] aim was to refine language, removing its perceived imperfections and illogicalities, and to create an ideal language. The response of Austin and his group was to observe that ordinary people manage to communicate extremely effectively and relatively unproblematically with language just the way it is. Instead of striving to rid everyday language of its imperfections, [Austin] argued, we should try to understand how it is that people manage with it as well as they do. (Thomas, 1995)

We adopt an ordinary language approach against deflationism — a theory that qualifies as a textbook example of ideal language philosophy. Yet we oppose deflationism not on philosophical but empirical grounds. In order to accomplish the latter, we collect, using unstructured corpora, sentences which include the construct "it is true that". Upon close scrutiny these lend support to the view that the predicate "true" does not seem to be redundant.

We owe specific motivation for this work to Strawson (1950) who suggests that there exist non-descriptive, performative uses of "true". His main point is that the phrase "is true" can sometimes be replaced with no important loss of meaning, by some such phrase as "I confirm it", which is performative in a strong sense (Austin, 1962).

2. Our approach

Search engines return an excessive number of results for the query "it is true that". Surely we need examples from linguistically trustworthy media. This is why we collected examples from 10 popular and respectable periodicals published in the United States. These are considered to be linguistically reliable sources of English as they undergo strict editorial examination. We analyzed 7,610 examples collected from these sources, where the phrase "it is true that" is used.

The focus of our analysis is to investigate contextual relations of the proposition containing the phrase with its surrounding propositions. We extract coordinating and subordinating conjunctions and determine syntactical patterns with respect to these conjunctions' positions.

We performed our analysis by acquiring examples from the electronic archives of the periodicals. We used the Bing Search Application Programming Interface (API). We preprocessed data in order to get the relevant co-text for each example. Then, we syntactically classified data with the help of Stanford University Natural Language Processing (NLP) Group's Part of Speech (POS) Tagger. Finally, we annotated the syntactically classified examples.

The Bing Search API is a web service provided by Microsoft via Windows Azure MarketPlace. With it, one can obtain and use data that is collected by the Bing Search Engine. We used this API in order to retrieve textual data we need, namely examples to be analyzed, from the archives of the periodicals in Table 1.

Table 1. List of periodicals used

Periodical	Abbrev.	Website
The Washington Post (daily)	WP	washingtonpost.com
The New York Times (daily)	NYT	nytimes.com
The Los Angeles Times (daily)	LAT	latimes.com
The Chicago Tribune (daily)	CT	chicagotribune.com
The San Francisco Chronicle (daily)	SFC	sfgate.com
The USA Today (daily)	USAT	usatoday.com
The New York Post (daily)	NYP	nypost.com
The Washington Examiner (daily)	WE	washingtonexaminer.com
The Boston Globe (daily)	BG	bostonglobe.com
The Nation (weekly)	N	thenation.com

We performed our search using two different queries, namely, "it is true that" and "it's true that", for each periodical. (We take "it is" and "it's" to be equivalent.

We won't repeat this fact in the sequel.) Number of results we got for each periodical-query pair is given in Table 2.

Table 2. Number of results for each periodical

Periodical	"it is true that"	"it's true that"	TOTAL
The Washington Post	836	909	1,745
The New York Times	680	867	1,547
The Los Angeles Times	682	740	1,422
The Chicago Tribune	322	449	771
The San Francisco Chronicle	301	439	740
The USA Today	215	421	636
The New York Post	164	195	359
The Washington Examiner	40	109	149
The Boston Globe	42	90	132
The Nation	33	76	109
GRAND TOTAL	3,315	4,295	7,610

We examine contextual relations of the proposition following the phrase "it is true that" with its surrounding propositions. To accomplish that, we extract the co-text for each result, namely the paragraph containing the phrase. We get the corresponding paragraph for each result's URL, and keep them in a file, built for each periodical-query pair. We have 10×2=20 such files. For example, part of the file built for *The Nation* and the query "it is true that" is shown in Figure 1.

```
-<thenation.com>
  -<URL>
      http://www.thenation.com/article/easy-rider
      <TEXT> It is true that every night over their campfire Wyatt and Billy smoke pot, achieving thus a
      sudden irrational loquacity, accompanied by inane giggles. They pity friend George for his
      addiction to booze. But, so the script goes by these knowing men, when George is sober he is
      wide awake, when the other two are not high they are merely low, if indeed not half asleep. It may
      only be coincidence, and marijuana may yet be recognized as the cure for what ails us all, but the
      demeanor of Wyatt and Billy does not seem to prove the point. </TEXT>
  </URL>
  -<URL>
      http://www.thenation.com/blog/169412/paul-ryan-doesnt-follow-ayn-rand-civil-liberties
      <TEXT>This, alas, is false. It is true that Ryan, like his mentor Jack Kemp, subscribes to Rand's
      heartless belief in refusing to aid the less fortunate. But Ryan does not share any of Rand's
      commitments to freedom, other than the freedom to be selfish. </TEXT>
  </URL>
```

Figure 1. Part of the file built for *The Nation*

We used Stanford University Natural Language Processing (NLP) Group's Part of Speech (POS) Tagger in order to tag each word in paragraphs. The paragraphs contain examples of the overt use of the predicate "true", acquired via Bing Search API.

This part of speech tagger is trained on *The Wall Street Journal* Corpus Sections 0–18 using a bi-directional architecture and including word shape and distributional similarity features. Its success rate is 97.28% on *The Wall Street Journal* Corpus, Sections 19–21, and 90.46% on unknown words (Toutanova, 2012). We updated our files, constructed for each periodical-query pair by adding tagged versions of paragraphs, by using this POS Tagger. For example, tagged version of the file in Figure 1 is displayed in Figure 2.

Figure 2.   Tagged version of the file in Figure 1

As can be seen in Figure 2, this tagger assigns part of speech name abbreviations to each word, using the Penn Treebank tag set (Marcus et al., 1993) provided in Figure 3.

1. CC	Coordinating conjunction	25. TO	*to*
2. CD	Cardinal number	26. UH	Interjection
3. DT	Determiner	27. VB	Verb, base form
4. EX	Existential *there*	28. VBD	Verb, past tense
5. FW	Foreign word	29. VBG	Verb, gerund/present participle
6. IN	Preposition/subordinating conjunction	30. VBN	Verb, past participle
7. JJ	Adjective	31. VBP	Verb, non-3rd ps. sing. present
8. JJR	Adjective, comparative	32. VBZ	Verb, 3rd ps. sing. present
9. JJS	Adjective, superlative	33. WDT	*wh*-determiner
10. LS	List item marker	34. WP	*wh*-pronoun
11. MD	Modal	35. WP$	Possessive *wh*-pronoun
12. NM	Noun, singular or mass	36. WRB	*wh*-adverb
13. NNS	Noun, plural	37. #	pound sign
14. NNP	Proper noun, singular	38. $	dollar sign
15. NNPS	Proper noun, plural	39. .	sentence-final punctuation
16. PDT	Predeterminer	40. ,	Comma
17. POS	Possessive ending	41. :	Colon or semi-colon
18. PRP	Personal pronoun	42. (	Left bracket character
19. PP$	Possessive pronoun	43.)	Right bracket character
20. RB	Adverb	44. "	Straight double quote
21. RBR	Adverb, comparative	45. '	Left open single quote
22. RBS	Adverb, superlative	46. "	Left open double quote
23. RP	Particle	47. '	Right close single quote
24. SYM	Symbol (math. or sci)	48. "	Right close double quote

Figure 3. Penn Treebank tag set

It is worth noting that we deal with CC and IN tags, since we are trying to investigate how the proposition following the phrase "it is true that" is connected to its neighboring propositions. The tab CC represents coordinating conjunctions and the tag IN represents prepositions and subordinating conjunctions. In the Penn Treebank POS Tag Set, prepositions and subordinating conjunctions are combined into one set. Among them, however, only subordinating conjunctions can give us useful information, viz. how the proposition, in which the predicate "true" is used overtly, is connected to the co-text.

Thus, we form a list of words consisting of prepositions, which cannot be a subordinating conjunction, and treat this list, which is provided in Figure 4, as a stop-word list.

After eliminating these words, we look at subordinating and coordinating conjunctions in the sentences right before and right after the sentence containing the phrase (and of course, the sentence itself). Then, we determine an input token's syntactical pattern based on the most atomic conjunction's position with respect to the phrase "it is true that".

aboard	below	for	opposite	times
about	beneath	form	out	to
above	beside	given	outside	toward
across	besides	in	over	towards
after	between	including	past	under
against	beyond	inside	per	underneath
along	by	into	plus	unlike
amid	concerning	like	regarding	until
among	considering	minus	round	up
around	despite	near	save	upon
as	down	next	since	versus
aside	during	of	than	via
at	expect	off	that	with
before	excluding	on	through	within
behind	following	onto	till	without

Figure 4. The stop-word list

For instance, following two examples from *The Nation* have the syntactical pattern

> It is true that *prop*, but *prop*

> I spoke to a military representative who said the theater was closed down because the courtroom wasn't full. It is true that Saturday the courtroom was not at spectator capacity, but that was the day of the public rally protesting the prosecution of Bradley Manning, so it's not surprising there were fewer people in the court.[1]
> It is true that, despite all that has happened, Gorbachev is now presiding over the most ambitious attempt yet to change the system from above, at least to begin with. But the climate is not quite what it used to be.[2]

The following example, again from *The Nation*, has the syntactical pattern

> While it is true that *prop, prop*

> It is akin to teaching children about alcohol use, then instructing them on how to make mixed alcoholic drinks. While it is true that some children will wrongly choose to engage in sexual behavior before entering adulthood, our school districts should never promote illegal activity.[3]

We automatically classify all 7,610 occurrences of the phrases "it is true that", considering coordinating and subordinating conjunctions, with the help of the

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1. R. Reitman, Access Blocked to Bradley Manning's Hearing, *The Nation*, December 22, 2011.

2. D. Singer, The Specter of Capitalism, *The Nation*, March 21, 2011.

3. C. A. Leon, It's Detention Time for Sex Education Teachers, *The Nation*, April 30, 2010.

Stanford POS Tagger. However, annotation of these classified examples is needed for the sake of this analysis, due to following reasons:

– *Error rate of the POS Tagger*

> The error rate is 2.72% on the test set and 9.54% on unknown words (Toutanova, 2012).

– *Error rate caused by the stop-word list*

> We use a list consisting of frequently used prepositions. Whenever a rarely used preposition that is not on the list appears, this classifier treats it as a subordinating conjunction. More importantly, there exist some frequently used words, which can be used as a preposition or as a subordinating conjunction. Consider the word "but". With this approach, we treat each occurrence of it as a conjunction yet it may be used as a preposition.

– *Computational difficulty in classification*

> Consider the following examples:

> It is true that Saddam Hussein had a history of pursuing and using weapons of mass destruction. It is true that he systematically concealed those programs, and blocked the work of UN weapons inspectors. It is true that many nations believed that Saddam had weapons of mass destruction. But much of the intelligence turned out to be wrong. And as your president, I am responsible for the decision to go into Iraq.[4]

> 'It is true that the Indians are trying to marry our daughters.' said one exception, Edouard Abida, 59, president of the Pondicherry French Veterans Assn. and the father of three daughters. 'But I would never do that. I would never betray la France.'[5]

> Both examples should be classified as an instance of the syntactical pattern:

> It is true that *prop,* but *prop*

> However, our classifier cannot handle these abnormalities. We found it much more reasonable to annotate classified examples, rather than defining new rules for each type of abnormality.

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4. The Associated Press, Text of President Bush's Speech on the Iraq War, *The USA Today*, December 18, 2005.

5. R. Tempest, Affluence, Corruption: Pondicherry: India French Connection, *The LA Times*, March 23, 1987.

3.   Results and discussion

All in all, we used classification results as a guide and annotated all occurrences of phrases "it is true that" for each periodical. We encountered 34 syntactical patterns, as noted in Table 3.

An interesting observation is that when the number of overt uses of the predicate "true" increases in a periodical, the number of different patterns observed, with respect to subordinating and coordinating conjunctions' positions, also increases.

Another observation is that hypothetical examples employed by the deflationists have invariably the syntactical pattern

> It is true that *prop*

However, only a portion of ordinary language examples observed conforms to this basic pattern. The ratio of basic examples (to all examples in a periodical) is at a minimum 23.5% for *The New York Post* and at a maximum 34.9% for *The Boston Globe.*

On the other hand, even though there are 34 different syntactical patterns, the following three patterns are the most common for each periodical:

> It is true that *prop*
> It is true that *prop*, but *prop*
> While it is true that *prop, prop*

When all examples are taken into account, the syntactical pattern that contains the most number of instances is not

> It is true that *prop*

but

> It is true that *prop*, but *prop*

In 69% of all examples, the phrase "it is true that" is used with a subordinating and coordinating conjunction. Figure 5 shows those syntactical patterns whose percentage is at least 1%. The pie chart has only 8 reasonably thick slices, meaning 26 out of 34 patterns are encountered in less than 1% of the instances.

Actually, the situation is more dramatic than what is presented here. We examine and classify with respect to subordinating and coordinating conjunctions, which consist of only one word. However, there are many instances where propositions are connected via conjunctions, consisting of more than one word, as shown in the following examples.

Table 3. Number of occurrences of syntactical patterns for each periodical

Syntactical Pattern	BG	WE	NYP	N	USAT	SFC	CT	LAT	NYT	WP	TOTAL
It is true that *prop*	38	32	35	119	208	184	247	442	489	581	2,375
It is true that *prop*, but *prop*	44	70	67	131	207	313	252	450	611	663	2,808
prop, but it is true that *prop*	4	–	4	14	36	24	21	49	64	45	261
It is true that *prop*, however *prop*	–	5	1	15	9	19	28	71	52	46	246
prop, however it is true that *prop*	–	–	–	1	–	1	3	2	6	9	22
It is true that *prop*, yet *prop*	2	4	1	8	4	9	2	7	15	12	64
prop, yet it is true that *prop*	–	1	–	–	2	1	–	4	3	–	11
It is true that *prop*, unfortunately *prop*	–	–	–	–	–	–	–	4	–	1	5
prop, unfortunately it is true that *prop*	–	–	–	–	–	–	–	1	1	–	2
It is true that *prop*, nonetheless *prop*	–	–	–	1	1	–	2	2	1	3	10
prop, nonetheless it is true that *prop*	–	–	–	–	–	–	–	–	–	1	1
It is true that *prop*, nevertheless *prop*	–	–	1	–	–	3	–	4	–	2	10
prop, nevertheless it is true that *prop*	–	–	–	–	–	–	1	–	–	3	4
While it is true that *prop*, *prop*	17	10	16	39	92	116	119	191	199	221	1,020
While *prop*, it is true that *prop*	–	–	–	–	–	–	–	–	3	3	6
It is true that while *prop*, *prop*	–	–	–	–	1	–	–	1	1	2	5
Whilst it is true that *prop*, *prop*	–	–	–	–	–	–	–	–	–	1	1
Although it is true that *prop*, *prop*	1	2	1	6	14	18	14	53	21	23	153
Although *prop*, it is true that *prop*	–	–	–	–	–	–	–	–	3	–	3
Though it is true that *prop*, *prop*	–	5	5	1	9	8	14	37	5	6	90

Table 3. (*continued*)

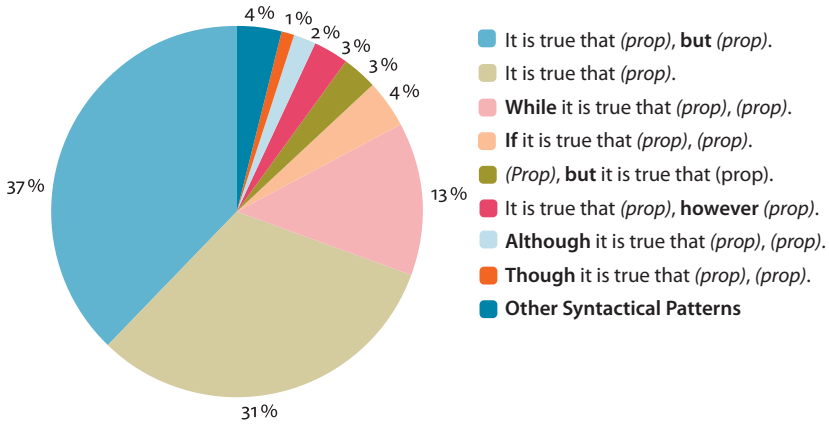| Syntactical Pattern	BG	WE	NYP	N	USAT	SFC	CT	LAT	NYT	WP	TOTAL
Though *prop*, it is true that *prop*	–	–	–	–	–	–	–	–	1	–	1
If it is true that *prop*, then *prop*	2	2	15	20	35	33	52	77	33	72	341
It is true that if *prop*, then *prop*	1	–	–	1	2	4	8	2	7	10	35
If *prop*, then it is true that *prop*	–	–	–	–	–	–	–	1	8	4	13
…(ask, wonder) if it is true that *prop*	–	1	3	–	7	6	8	15	1	16	57
…(ask, wonder) whether it is true that *prop*	–	–	–	–	5	1	–	6	1	6	19
It is true that *prop*, so *prop*	–	–	–	2	3	–	–	1	12	4	22
prop, so it is true that *prop*	–	–	–	–	1	–	–	1	3	1	6
It is true that *prop*, thus *prop*	–	–	–	–	–	–	–	1	–	1	2
It is true that *prop*, therefore *prop*	–	–	–	1	–	–	–	–	–	–	1
It is true that *prop*, because *prop*	–	–	–	–	–	–	–	–	4	1	5
prop, because it is true that *prop*	–	–	–	–	–	–	–	–	1	4	5
prop, since it is true that *prop*	–	–	–	–	–	–	–	–	–	3	3
It is true that *prop*, unless *prop*	–	–	–	–	–	–	–	–	2	1	3
GRAND TOTAL	109	132	149	359	636	740	771	1,422	1,547	1,745	7,610

Figure 5. Frequency of patterns

It is true that good kung fu fighting may not look good on camera. <u>On the other hand</u>, you can have a good actor who does not have real fighting skills but can make it up with a good feel.[6]

It's true that Mays was an inspiration to most new entrepreneurs out there at one point or another. <u>In fact</u>, he was the perfect embodiment of the American dream, from his humble beginnings on the Atlantic City Boardwalk to becoming a national icon with his own television show.[7]

It's true that I do not hear conservatives criticizing his decision to run. <u>On the contrary</u>, many conservatives see it as brave and as proof that he is 'walking the walk' on the abortion issue and beyond.[8]

It's true that conventional wars are easier to score. <u>By contrast</u>, insurgencies are often won and lost in the hearts and minds of civilians, where it's harder to see.[9]

Certainly it's true that Greece's level of corruption, while debilitating, has been nowhere near the levels of Russia or Iraq, according to Transparency International. <u>It's also true that</u> the Papandreou administration has made mistakes, and that has understandably fueled some of the protesters' complaints.[10]

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6. L. Munoz, Women on the Verge of a Breakthrough, *The Los Angeles Times*, November 19, 2000.

7. The LA Times Blog, But Wait!! There's (No) More! Billy Mays Dead, *The Los Angeles Times*, June 28, 2009.

8. M. Henneberger, Live Questions and Answers, *The Washington Post*, December 5, 2011.

9. J. Michaels, Fog of War: What Are We Missing?, *The USA Today*, August 11, 2010.

10. S. Hill, What's Wrong -and Right- with Greece, *The Nation*, July 20, 2011.

Note that according to our classification all of the above collapse to the pattern

> It is true that *prop*

As for the philosophical repercussions of our findings, it would be appropriate to recall Strawson (1950). He suggests that the phrase "is true" can sometimes be replaced, of course with necessary verbal changes, without any important change in the meaning, by some phrase including a performative verb in Austin's sense, e.g., "I confirm it." Here is Strawson on these non-descriptive, performative uses of "true":

> The word has other, equally non-descriptive, uses. A familiar one is its use in sentences which begin with the phrase "It's true that", followed by a clause, followed by the word 'but', followed by another clause. It has been pointed to me that the words "It's true that… but…" could, in these sentences, be replaced by the word 'Although'; or, alternatively, by the words "I concede that… but…" This use of the phrase, then, is concessive. (Strawson, 1950)

Strawson does not propose any rule but merely suggests that when "It's true that… but…" occurs, it could be replaced by "I concede that… but…" While formulated in his usual modest style, what Strawson is pointing at is important. The existence of the predicate "true" may make an emphasis or perform an action in the same way the verb "concede" does.

We cannot give hard-and-fast rules that determine the performative role of the predicate "true" based on the syntactical pattern it exemplifies. It is significant to recognize that pragmatics cannot be characterized in terms of rules, which are strict and definitive; it is best described in terms of principles. However, we do not try to describe any principles, either. We provide a set of performative verbs in Table 4. Some verbs are grouped together; while there are nuances between them, they seem to achieve similar ends.

Table 4.   Some performative verbs

Confirm affirm	verify	concede admit acknowledge	confess	agree	accept

We now present examples, where the use of "it is true that" makes an emphasis, performs an action, in the same manner with a performative verb provided in Table 4.

> confirm, affirm

> '<u>It's true that</u> I come from a very poor family, a family of six kids, and I'm the oldest, so we had to work hard to make a living,' he said. 'That's how I started caddying, because my parents couldn't afford to take me to school, but through

caddying I managed to move a little step forward. I caddied at Sun City for many years. I'm still there now, and I always go there.'[11]

verify

Freestyle skiing, snowboarding and BMX were added to the Olympic program not so much to appeal to American TV viewers, as to attract the youth audience. Having said that, <u>it is true that</u> the sports and events added to the Winter Olympics since 1992 have been heavily skewed toward North America. Here is a chart from the 2006 Turin Winter Olympics that tells how many total medals each of the leading winter powers won and how many of them came in the new events.[12]

concede, admit, acknowledge

<u>It is true that</u> black people were once used as slaves, but nowadays the world's view has changed dramatically. It is safe to say that more Americans accept diversity in this age and time, and that the once negative connotations of race have slowly turned positive. Obama represents this new acceptance of diversity in American culture, and perhaps, people will be more open about race in the future because of him.[13]

confess

Mr. Amis shot back that he didn't blow smoke on his dying friend — Christopher Hitchens did — but that he was guilty of the other charge. '<u>It is true that</u> I am a useless godfather.'[14]

agree

<u>It is true that</u> cloning research offers hope, however speculative, for understanding and treating disease. Yet we should not deceive ourselves about the value and necessity of such research: there is virtually no precedent in animal work that demonstrates the unique benefits of creating and exploiting cloned embryos; we have only just begun to understand existing embryonic stem cells; and promising results with adult stem cells, if confirmed, may obviate altogether the putative need for cloned stem cells.[15]

accept

Today, the Eddie Haskells rule. An eager smile or a front-row seat can mask, or outweigh, a failure to master the material. <u>It's true that</u> the world rewards good

11. C. Clarey, Representing a Nation without Inserting Politics, *The New York Times*, July 17, 2010.

12. D. Wallechinsky, David Wallechinsky Gives His Answers to Readers' Questions (Part 1), *The New York Times*, June 17, 2008.

13. Comment, Why Is Race Hard to Talk About?, *The New York Times*, July 27, 2010.

14. B. Feiler, The Godparent Trap, *The New York Times*, May 28, 2010.

15. L. R. Kass, How One Clone Leads to Another, *The New York Times*, January 24, 2003.

behavior — but that represents only a tiny fraction of the rewards that go to the innovators, the thinkers, the doers.[16]

4. Conclusion

The act of judging that something is the case plays a central part in our daily lives. Frege introduced a sign to mark this act. The sign he used was "|" (the judgment stroke). Frege also used "-" (the content stroke) as a sign which turns what follows it into judgeable content. Normally, "|" and "-" are combined to get "⊢" (the turnstile). When followed by a sentence, the turnstile turns the sentence into an assertion. Frege's crucial observation was that the sentence 'the thought that p is true' and 'p' make exactly the same truth-claim, provided that they are uttered with assertoric force (as indicated by the turnstile). In other words, Frege saw that the essential truth claim is not made by the predicate "true"; rather, it is rendered by the act of asserting (Potter, 2010).

The deflationary theory of truth, or specifically the equivalence schema, fails to capture this phenomenon. One might argue that a deflationary theorist's concern is semantics, while what we study here is pragmatics. But one needs to remember that despite the early antagonism between ideal language philosophy and ordinary language philosophy, semantics and pragmatics are now conceived of as complementary disciplines, shedding light on different aspects of language (Recanati, 2006).

We challenged deflationism, by computationally collecting examples from linguistically reliable and respectable textual sources. We used automatic search to amass occurrences of "it is true that". We then classified these with the help of a tagger. The emerging patterns were determined by the positions of coordinating and subordinating conjunctions in the examples, with respect to the position of "it is true that". We annotated these examples.

We argued that in some occurrences of overt uses of the predicate "true", existence of this predicate makes an emphasis or performs an action in the same manner as a performative verb does. Deflationism cannot accommodate such phenomena.

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16. To The Editor, A Diligent Student, or a Smart One?, *The New York Times,* December 4, 2010.

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