GoodFor/BadFor and Writer Attitude Annotation Guide

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1 Introduction

Picture an information analyst searching for information online or in the news. Our research goal is to build an automatic system to help him or her find what they are looking for.

In order to develop a computer system to do this, we need people to annotate (mark up) texts with relevant properties. Below are descriptions of the properties we want you to annotate. We will not give you formal criteria for identifying them. We don't know formal criteria for identifying them! We want you to use your human knowledge and intuition to identify the information. Our system will then look at your answers and try to figure out how it can make the same kinds of judgments itself.

When you annotate, please try to be as consistent as you can be.

In addition, it is essential that you interpret sentences and words with respect to the context in which they appear. Don't take them out of context and think about what they *could* mean; judge them as they are being used in that particular sentence and document.

You will probably need to go through the instructions more than once.

The data used in this project are editorials about Obamacare.

2 A Brief Summary of the Annotations

As you may already know, the annotation is to find phrases referring to events which have either positive or negative effects on entities. We call these events $goodFor/badFor\ events$, or gfbf's for short. We will also ask you to identify the affected entity (the object) and the entity causing the event (the agent). Moreover, we will ask you to annotate the writer's attitude towards the agents and toward the objects.

We suggest that the annotation be carried out in two phases: the first is to find out the <agent, goodFor/badFor, object> triples; the second is to find out the writer's attitude toward the agent and object. We first give the structure of the annotations. Then, we explain the goodFor/badFor annotations via simple

(madeup) examples, then give examples from the real data. The final section of the guide is about the speaker-attitude annotations.

3 Structure of the annotations

1. goodFor/badFor

```
span the text span expressing the gfbf event
polarity goodFor, badFor
agentID id, implicit, or BLANK
    Notice that if the agent is implicit, we do not to annotate an agent.
objectID id
    a goodFor/badFor always has a object.
```

2. agent

```
span the text span referring to the agent
writerAttitude positive, negative, none
```

3. object

```
span the text span referring to the object writerAttitude positive, negative, none
```

4. influencer

```
span the text span expressing the influencereffect retain, reverseagentID id, implicit, or BLANKobjectID id
```

4 goodFor/badFor annotations

In the first annotation phase, we will ask you to recognize $\operatorname{goodFor/badFor}$ words/phrases.

4.1 Simple Cases

Many of the circumstances could be judged by intuition, and we assume you share the most common fundamental ethical values. We'll not cover any religious, gender, political or other controversial issues here. If you want to mark *kill somebody* as a goodFor, please tell us and we might treat you more than an annotator.

Let's begin with some simple examples.

1. John killed Bill.

span killed
polarity badFor
agent John
object Bill

2. John helped Bill.

span helped
polarity goodFor
agent John
object Bill

3. John protected Mary.

span protected
polarity goodFor
agent John
object Mary

4.2 To Exist is Good

We assume here, for anyone or anything, to live on earth is good, in general. For example:

I'm baking a cake.

span baking

polarity goodFor

agent I

object cake

For the cake, it is the action of baking it that contributes to the birth of the cake.

Similarly, an increasing amount/number can be seen as goodFor, a decreasing amount/number can be seen as badFor. More examples are given below:

1. John raised the tax rate.

```
span raised
polarity goodFor
agent John
object the tax rate
```

2. John developed a plan.

span developedpolarity goodForagent Johnobject a plan

3. The wrecking ball destroyed the building.

span destroyed
polarity badFor
agent the wrecking ball
object the building

4. John's court appeal was denied.

span denied
polarity badFor
agent implicit (no agent)
object John's court appeal

- 1. We don't know who denied it, so agent = implicit.
- 2. Now, as humans, we infer that this is probably bad for John as well. However, we are not asking you to mark that. We only want you to mark explicit goodFor/badFor phrases (like *denied* in this sentence) and their direct agents and objects. 3. The agent is *implicit*, not BLANK. As described below in Section ??, the agent is sometimes left blank because there is an influencer in the sentence with the same agent.
- 5. The smell stifled his hunger.

span stifled
polarity badFor
agent the smell
object his hunger

6. The smell intensified his hunger.

span intensified
polarity goodFor

agent the smell
object his hunger

7. He proposed the law.

span proposed
polarity goodFor
agent he
object the law

Notice that we only consider the circumstances within this sentence. Even if the law is not later passed, we consider proposing it to be goodFor it.

4.3 Distinguishing state from event

We are annotating events that have a good or bad effect on the object. There are many words, such as kill, increase, eliminate, that are often used to refer to such events. However, in some sentences, the same words can be used differently, in such a way that they should *not* be annotated as gfbf events. Consider this example:

1. The biggest threat to American economic growth in the next decade is not rising oil prices or the recent financial meltdown: It is the increasing cost of health care.

In the sentence above, there are two phrases of interest: rising oil prices and increasing cost of health care. The words rising and increasing could be used to refer to gfbf events. However, in the sentence above, rising and increasing describe the current state of their objects. They do not refer to events that cause their objects to rise and increase, respectively. Thus, neither should be annotated as a gfbf event in this sentence.

We focus on words evoking an event which will cause good or bad result to the object, if the event were to really happen. The context should be considered to determine this. This is in accordance with what we stated above, that words should be considered in context, instead of simply their dictionary meanings.

Another situation where states need to be distinguished from events is in the case of sentiment. We don't consider sentiment, in itself, to be a goodFor/badFor event.

Consider this sentence: American opinion has consistently polled in favor of repeal. (hc110)

In favor of is a state of American thinking toward repeal. It could be seen as "like", i.e., a sentiment; thus, we don't mark it.

However, if "in favor of" were substituted by "praise", then we *would* have a goodFor event, since praising someone is not merely a state. The agent needs to speak or do something else to express his praising action.

If "in favor of" were replaced by "support", we often find we have a a borderline case. You should ask yourself, is it purely being used to describe a state of being positive toward something (in which it should not be annotated as a gfbf event), or does it evoke some action(s) on behalf of the object (in which case it should be).

4.4 Insubstantial goodFor/badFor

Insubstantial goodFor/badFor's are those goodFor/badFor's that happen in insubstantial cases. A "real" goodFor/badFor is presented as an existing event within the domain of discourse; for example, it is not in a hypothetical. You don't need to distinguish real versus insubstantial goodFor/badFor's; we want you to mark them in either case. Another term, if you're familiar with linguistics, could be irrealis. Examples below could eliminate your fear of such terms:

1. John tried to kill Bill.

```
span kill
polarity badFor
agent John
object Bill
```

The killing event didn't happen. That's OK; mark it anyway.

2. If an earthquake were to occur, she would protect her daughter.

```
span protect
polarity goodFor
agent she
object her daughter
```

From the sentence we know that the event of protecting is hypothetical, i.e., it is only in the event of earthquake. That's fine; please mark the goodFor anyway. Other words, such as would, could, might, and other syntactic structures, may occur in the discourse with the same effect. Just treat them as the goodFor/badFor's that are real in context.

4.5 goodFor/badFor with two argument

Consider the two sentences below:

1. Tom has left his cousin a great deal of property.

2. Tom has left his cousin a big trouble.

There is no way to break these sentences up into an <agent,gf,object> triple which follows our rules.

- 1. <Tom,left,his cousin>: this breaks the rule in Section ?? that we must be able to perceive the goodFor relationship by looking only at the triple. Without knowing what Tom left his cousin, we don't know whether the event is goodFor or badFor Tom's cousin.
- 2. <Tom, left his cousin, a great deal of property>: this isn't correct. The event is not goodFor the property, it is goodFor Tom's cousin.
- 3. <Tom, left his cousin a great deal of property, Null>: Now, we don't have a object.

We will address such cases in future work. If you cannot break the gfbf into an <agent,gfbf,object> span that follows the rules, then please do not mark it. We will address such cases in future work.

4.5.1 goodFor/badFor itself, even if two arguments

Consider this sentence:

1. Nor will your children ever be denied coverage for pre-existing conditions.

Or, consider this simpler variation:

1. Deny your children coverage for pre-existing conditions.

Like the two *left* examples above, here *deny* also has two arguments: one is *your children*, and the second is *coverage for pre-existing conditions*. However, no matter what the second argument is, *deny* itself is badFor.

We point this out to emphasize that sometimes, a goodFor/badFor with two arguments can be marked. Only the ones whose polarity depends on information outside of the spans in the triple should not be marked. For a goodFor/badFor such as deny above, we could have a complete triple, from which we can recognize that the event is badFor, namely <implicit, deny, your children>; we do not need to consider the second argument (coverage) to see that the event is badFor the children. Such cases should be annotated.

4.6 goodFor/badFor affecting agent

Sometime goodFor/badFor will affect the agent, instead of the object. See the sentences below:

- 1. I lost my keys.
- 2. Tom won the competition.

For the first sentence, lost is badFor I, but it doesn't have a direct influence on the keys. The same is with the second example. The event of win is goodFor Tom, but it isn't good or bad for the competition.

The two examples above have one thing in common: syntactically, the affected person is the agent of the goodFor/badFor text span. For sentences like these, the gfbf event should not be marked.

4.7 Influencer Annotating Rules

There are two kinds of influencers in our annotation scheme. One is **retainer**, the other is **reverser**. A retainer retains the polarity, while a reverser reverses or removes it. Influencers have agents and objects as well.

Often, the object of an influencer is a goodFor/badFor. Sometimes, the object of an influencer is another influencer.

Several cases are developed here to help you understand the two kinds of influencers and to judge when to annotate them.

4.7.1 If the polarity of the goodFor/badFor is affected, then always mark the influencer, as reverser.

Link it to the thing that is reversed (i.e., the influencer-object). For an influencer, if the influencer-agent and the agent of the influencer-object are the same span of words, then you don't need to mark both of them; just mark one, either the influencer agent, or the goodFor/badFor agent. Look at the sentence below.

1. Luckily John didn't kill Bill

(a) goodFor/badFor:

span kill
polarity badFor
agent BLANK
object Bill

(b) influencer

span didn't effect reverse agent John object (a)

Two things to pay attention to here: 1. the agent of the goodFor/badFor (kill), is the same as the agent of the reverser (didn't). Thus, we only annotate the agent of the reverser and leave the other one blank. That saves annotation

time; our system will figure out that the two are actually the same. 2. The object of the reverser (didn't) is the goodFor/badFor (a). In actual annotating, we mark the span in (a).

4.7.2 If the influencer retains the polarity, that is, if it is a retainer, we mark it only when the influencer-agent and the agent of the influencer-object are different

1. Tom tried to raise the tax.

```
span raise
polarity goodFor
agent Tom
object the tax
```

Although *tries to* here plays the role of retainer, the agent noun phrase is the same for both *tries to* and *raise*; in such cases we ignore the retainer.

- 2. John helped Mary to save Bill
 - (a) goodFor/badFor:

```
span save
polarity goodFor
agent Mary
object Bill
```

(b) influencer:

span helped effect retain agent John object (a)

For this example, obviously the influencer-agent (John) and the agent of the influencer-object (Mary) are different. So we mark the influencer here.

- 3. John pushed himself to save Bill.
 - (a) goodFor/badFor:

```
span save
polarity goodFor
agent himself
object Bill
```

(b) influencer:

```
span pushed
effect retain
agent John
object (a)
```

In this example, although we as humans know *John* and *himself* are the same person, the agent-verbs are different words. Therefore we treat the two agents as different entities and mark both the goodFor/badFor and the retainer.

4. John pushed to save Bill.

```
span save
polarity goodFor
agent John
object Bill
```

Compared to the previous one, we ignore *pushed to* here since its influenceragent is referred to with the same noun phrase as the agent of influencer-object *save*.

4.7.3 Examples with more than one influencer

But aren't influencers goodFor/badFor's?

Because influencers are reversers or retainers, they are actually also goodFors or badFors! If John helps Mary Kill Bill, then John's helping is goodFor Mary. Similarly, if John stops Mary from Killing Bill, then John's stopping her is badFor Mary.

Fortunately, the system will be able to figure out that those goodFor, badFor relations are there, without having to make you annotate them. So, please do not mark them. We define here that **The object of an influencer is either another influencer or goodFor/badFor**. For cases in this section, our principle here is to try to find one main goodFor/badFor here, annotating others as influencers.

- 1. He stopped trying to kill Bill
 - (a) goodFor/badFor: span kill

polarity badFor

```
agent BLANK
object Bill
```

(b) influencer

```
span stoppedeffect reverseagent Heobject (a)
```

It is true that $trying\ to$ here could be a retainer; however, since it shares the same agent of reverser (stopped) before it and the goodFor/badFor (kill) after it, we ignore this retainer. For the reverser (stopped), we have to annotate it since it affects the polarity here.

2. He tried to stop killing Bill

(a) goodFor/badFor:

```
span killing
polarity badFor
agent BLANK
object Bill
```

(b) influencer

```
span stop
effect reverse
agent He
object (a)
```

Similar to the previous example, we ignore $tried\ to$ here and only annotate the stop.

3. He stopped stopping killing Bill

(a) goodFor/badFor:

```
span killing
polarity badFor
agent BLANK
object Bill
```

(b) influencer

```
span stopping
effect reverse
agent BLANK
object (a)
```

(c) influencer

```
span stopped
effect reverse
agent He
object (b)
```

We need to annotate *stopped* and *stopping* since they're both reversers. This is a chain so that each one's object is the component after it. However, as the three have the same agent, we only need to annotate the outside agent of this chain.

4.7.4 Strange Negations

Consider the sentences No member created the shortage and Noone created the shortage. The subject noun phrases of these sentences are actually negators! What you should do in this case is paraphrase the sentence using "normal" negation, and annotate the sentence as if it really were the paraphrase. However, mark the influencer-span that is in the original sentence.

- 1. No member helped create the shortage; paraphrased: the members did not create the shortage.
 - (a) goodFor/badFor:

```
span create
polarity goodFor
agent BLANK
object the shortage
```

(b) influencer

```
span No
effect reverse
agent member
object (a)
```

- 2. Noone created the shortage; paraphrased: the shortage was not created.
 - (a) goodFor/badFor:

```
span create
polarity goodFor
agent BLANK
object the shortage
```

(b) influencer

```
span Noone
effect reverse
agent implicit
```

4.7.5 Reverses are to flip (or remove) the goodFor/badFor polarity

1. President Obama's Federal Coordinating Council for Comparative Effectiveness Research was sold as simply government helping doctors choose the best treatments. (hc002)

An interesting word here is *simply*, which indicates the event of *government helping doctors* a lie, or something which is different from what it appears. If we consider the sentence as a whole, we can say *simply* here is subjectivity, expressing the writer's arguing false.

However, we don't take subjectivity into consideration for this annotation. That means we don't annotate *simply* here, though it indicates, to some extent, the government might not actually help doctors.

Let's consider another example:

1. True, it was Obama's original rationale for creating a whole new entitlement at a time of a sinking economy and a bankrupt Treasury. (hc002)

The word *True* exhibits an enigmatical tone of the writer, towards the event of Obama creating a new entitlement. You may have to think twice what Obama really intended to do, when you see the word *True*.

Words such as *simply*, *True*, are subjectives expressed by the author. They may influence your perception of the related event, however, they do not directly change the goodFor/badFor itself. Compared to a typical reverser:

1. He prevented Sally from saving Mary.

We mark prevented as reverser, since it directly affects saving. Note here reverser has nothing to do with whether the reverser makes the goodFor/badFor not happen at all. It is an event, or action, conducted by an agent (no matter whether or not it is the same as the goodFor/badFor agent), which blocks the goodFor/badFor event towards the object in the end. In short, if we've marking the reverser, you have to see a goodFor become a badFor (or at least not be a goodFor any longer).

4.8 Syntax Rules

Before we go through real examples, we'd like to review the syntax rules first.

4.8.1 agent and object

1. Only mark agents and objects of goodFor/badFors *gfbf's* if they are referred to by noun phrases.

- 2. The agent and object spans have to be syntactic arguments of the gfbf span.
- 3. The affected entity in the sentence must be the syntax object, not the syntax agent. Don't mark the object which is the agent of the verb. For example, we'll not mark the case of "The price has increases". Though increasing is goodFor price, but first it's a description of the price itself, second the gfbf's object here is the syntax agent, so don't mark the case.
- 4. The agent and object spans have to be correct semantic arguments of the gfbf span.

Consider the sentence of: *Udall could muster the courage to buck his party*. For the gfbf of "buck", syntactically speaking, the courage is the subject of it. However, the courage itself cannot be who bucked the party; it is Udall himself who is able to do so. We're looking for the entity who has the initive of accomplishing the event.

Notice that this doesn't violate the syntax rule of "The agent and object spans have to be syntactic arguments of the gfbf span". The "courage" is an infmod(infinite modifier) of "buck", instead of any dependency relation of "subj". Rather, "Udall" is the subject of "muster" and "courage" is the object of "muster".

For the sentence above, we mark two gfbf spans: one is [Udall]agent [muster]gf [the courage to buck his party]; the other is [Udall]agent [buck]badfor [his party].

4.8.2 goodFor/badFor span

- 1. Though it often is, the gfbf span does not need to be a verb or verb phrase.
- 2. The agent, gfbf, and object spans must be sufficient to perceive the gfbf relationship.

If you need something outside the triple to perceive the gfbf span and the polarity of it, please don't mark it. E.g. "I give him a warm hug". "I give him" should not be marked because whether the action of "give" is good or bad depends on the following component, which is "a warm hug" in this sentence. Such cases should not be marked. Please refer to Section 4.5 for further information.

3. The gfbf span or an ancestor influencer-span has to include the main verb of a clause.

This refers to one clause which contains multiple influencers and a gfbf span. For a clause of a gfbf span, we expect the main verb (or, the root in the dependency parser) to be considered a necessary part of the whole gfbf span. There could be cases where the main verb is the retainer which shares the same agent of the following gfbf verb; in such case we do not annotate it to save time for annotator. However, we do SEE it.

Notice that this rule concerns the main verb of a CLAUSE, not the whole sentence.

4. For a word or phrase to be a gfbf, you must be able to add an agent for it to the sentence.

The question arises, how strict are these syntactic rules, and which syntactic theory are we appealing to? The rules are guidelines, and we are not evoking one specific syntactic theory. Please use your judgements.

4.9 Real examples

In this section, we annotate some real examples from the data, for practice and to illustrate various cases.

- 1. And it will enable Obama and the Democrats who run Washington to get back to creating jobs. (hc001)
 - (a) goodFor/badFors:

```
span creatingpolarity goodForagent Obama and the Democratsobject jobs
```

(b) influencer:

```
span enable
effect retain
agent it
object (a)
```

- 1. Creating jobs is goodFor jobs; the agent is Obama and the Democrats.
- 2. The phrase to get back to is a retain influencer. But, the agent span is also *Obama and the Democrats*, so we don't have to give an annotation to it.
- 3. The phrase $will\ enable$ is a retain influencer. Since its agent is different (namely, it), we do create an annotation for it.
- 2. The law prohibits all health plans from placing lifetime caps on coverage... (hc007)
 - (a) goodFor/badFor:

```
span placing lifetime caps on
polarity badFor
agent all health plans
object coverage
```

(b) influencer:

```
span prohibits
effect reverse
```

```
agent The law
object (a)
```

We have to wonder about this example whether it breaks the rule in Section 4.5 that you should not mark gfbf's that require two arguments to perceive the relationship. We gave this example: *Tom has left his cousin a great deal of property*. As we discussed above, we cannot break this sentence into an <agent,gf,object> triple that follows the rules.

However, we have a valid triple for this example by making *placing lifetime* caps on the gfbf span, all health plans the agent span, and coverage the object span.

- 3. Obamacare 2.0 promulgating draconian health-insurance regulation that prohibits (a) denying coverage for pre-existing conditions . . . (from hc002)
 - (a) i. goodFor/badFor:
 span denying
 polarity badFor
 agent BLANK
 object coverage for pre-existing conditions
 - ii. influencer

span prohibits
effect reverse
agent regulation
object a.i

(b) i. goodFor/badFor:

span promulgatingpolarity goodForagent Obamacare 2.0

object draconian health-insurance regulation that prohibits (a) denying coverage for pre-existing conditions

At first glance, perhaps it seems that *coverage* is a goodFor, and *denying* is an influencer. However, in this sentence, *coverage* is not being used as goodFor its object. Rather, its object specifies what type of coverage it is.

- 4. Fix what's broken, then move on. (hc001)
 - (a) goodFor/badFor:

span fix
polarity goodFor
agent implicit
object what's broken

In imperatives (commands), such as this one, we might have asked you to mark the agent as the person reading or listening to this sentence. However, please mark it as *implicit*, since there isn't an agent explicitly in the sentence.

- 5. Repealing the Affordable Care Act would hurt families, businesses, and our economy. (hc092)
 - (a) goodFor/badFor:

```
span hurt
polarity badFor
agent (b)
```

object hurt families, businesses, and our economy.

(b) goodFor/badFor:

```
span repealingpolarity badForagent implicitobject the Affordable Care Act
```

Note that the agent span is in fact a noun phrase (even though it refers to an event). Thus, it doesn't break the rule that all agent gfbf spans should be noun phrases.

- 6. The irony here, of course, is that at least some portion of our increasing medical expenditures which are driving the push toward reform can be attributed to this nation's generous policy of treating illegals in emergency rooms and passing the costs on to citizens (hc005)
 - (a) i. goodFor/badFor:

span be attributed to

polarity goodFor

agent this nation's generous policy of treating illegals in emergency rooms and passing the costs on to citizens

object at least some portion of our increasing medical expenditures

(b) i. goodFor/badFor:

span push toward
polarity goodFor
agent implicit
object reform

ii. influencer

span driving

```
effect retain
agent at least some portion of our increasing medical expendi-
tures
object (a.i)
```

To approach a complicated sentence like this one, first consider which words might be goodFor/badFor. Let's start with be attributed to. Next, Identify the syntactic arguments of the word or phrase. Here, they are at least some portion of our increasing medical expenditures and this nation's generous policy of treating illegals in emergency rooms and passing the costs on to citizens. Now, try to paraphrase things using simpler language, and see if you perceive a goodFor/badFor relationship. For example, Policy causes increasing costs. This paraphrase reveals the goodFor relationship, as well as which noun phrase is the agent span, and which is the object span.

Note that the goodFor relationship combines the causation of be attributed to (the goodFor span) with the increase of increasing medical expenditures (part of the object span). That is fine. There is a rule above in Section 4.8 above that the agent, gfbf, and object spans must be sufficient to perceive the gfbf relationship. This gfbf passes this rule: between the gfbf and object spans, we can perceive the goodFor relationship. It's OK if you have to combine information among the three spans to perceive it.

Now, consider the clause which are driving the push toward reform. This clause is difficult to paraphrase. It means something like: the increasing expenditures are motivating people to advocate for reform. People pushing for reform is goodFor reform. We can view driving as a retain influencer.

Does the influencer (*driving*) need to be marked? If the influencer agent and the goodFor agent are the same, then we don't need an annotation for *driving*. It turns out they are **not** the same, so we do need the annotation: The costs are doing the driving, while implicit advocates are doing the pushing.

- 7. Opponent's claim that the law is job-killing is in direct contradiction to what has actually been happening in the economy since enactment
 - (a) goodFor/badFor:

```
span in direct contradiction to
polarity badFor
agent what has actually been happening in the economy since enactment
object Opponent's claim that the law is job-killing
```

This is an example of a gfbf whose span is not a verb.

At first, we might not see a gfbf in this sentence. For example, two facts that contradict each other are not in a gfbf relationship. This paraphrase

reveals the badFor relationship: a claim that X is true is contradicted by event Y. This is clearly badFor the claim.

Of course, it's only the writer's opinion that the claim is contradicted by recent events, but that's OK: remember from Section 4.4 that the gfbf does not need to be real.

- 8. It should be seized, not squandered (hc013)
 - (a) i. goodFor/badFor:
 span seized
 polarity goodFor
 agent implicit
 object it
 - (b) i. goodFor/badFor:span squanderedpolarity badForagent implicitobject it

Interestingly, *seized* has usages where it is badFor its object. In this sentence, however, it is goodFor its object (due to the contrast with *squandered*).

The negator *not*, though syntactically near *squandered*, actually "belongs to" *should*. That is, we can paraphrase the sentence as *It should be seized*, *it should not be squandered*.

Here, should and should not express the writer's opinion. They are not part of the gfbf's themselves.

- 9. It is a moral obligation to end this indefensible neglect of hard-working Americans (hc004)
 - (a) goodFor/badFor:

span this indefensible neglect ofpolarity badForagent implicitobject hard-working Americans

(b) influencer

span end
effect reverse
agent implicit
object (a)

This example illustrates a gfbf that centers on a noun rather than on a verb. We can see that it passes the rules in Section 4.8. First, we could add an agent to the sentence, for example the government: It is a moral obligation to end the government's indefensible neglect of hard-working Americans. Also, it has an ancestor influencer, end which includes the main verb of a clause. Finally, the object is a syntactic argument of the gfbf span.

- 10. Companies that currently deduct part of their costs for providing these benefits to retirees will no longer be able to do so. (hc011)
 - (a) goodFor/badFor:

span providing these benefits topolarity goodForagent Companiesobject retirees

Though the span of goodFor/badFor is providing these benefits to, the phrase of the event is actually provide to. Though in the annotation we have these benefits as an argument of provide, we still mark it since provide to always means giving something good to somebody. That is to say, the polarity of provide to is always goodFor, no matter what is provided, it is always goodFor. This is consistent with section two arguments.

- 11. ObamaCare mandates that insurers spend a certain percentage of premium dollars on benefits. (hc011)
 - (a) goodFor/badFor

span spend a certain percentage of premium dollars on
polarity goodFor
agent insures
object benefits

Same with the previous example, the actual event of goodFor/badFor is spend on. However, for its component, a certain percentage of premium dollars, it doesn't affect the polarity of spend on and it only describes to what extent the agent cares about the object. For goodFor/badFor wth two argumetns like this, its non-affected component doesn't affect the goodFor/badFor polarity. Thus it is OK to mark them, according to the word meaning in the sentence.

- 12. the states' ability to keep their taxes low, to expand jobs and to object money for their own priorities (hc011)
 - (a) goodFor/badForspan expandpolarity goodFor

```
agent the states
object jobs
```

Notice that we didn't annotated the *keep their taxes low* here, since *keep their taxes* is goodFor/badFor depends on the adjective *low*, which is out-of-triple. Thus, we don't annotate that. The same is with *object money for their own priorities*.

- 13. All insurance plans are prohibited from imposing lifetime limits on coverage. (hc015)
 - (a) goodFor/badFor
 span imposing lifetime limits on
 polarity badFor
 agent All insurance plans
 object coverage
 - (b) influencer

span are prohibited fromeffect reverseagent implictobject (a)

It's reasonable to find out that the phrase $impose\ A$ on B has two arguments, for the phrase $impose\ on$. We can say that A is non-affected argument and B is the affected. However, the polarity of $impose\ on\ doesn't$ depend on the non-affected, A. No matter what A is, we can say that it is badFor B. Thus, we mark here as badFor. Note that what we actually mark here should be $impose\ on$, but the span contains $lifetime\ limits$.

- 14. All employer plans and new individual plans are restricted from setting annual limits on coverage. (hc015)
 - (a) goodFor/badFor
 span are restricted
 polarity badFor
 agent implicit
 object All employer plans and new individual plans

You may notice that there is a phrase of *setting annual limits on coverage*. We don't annotate it actually. Compared to the previous sentence, the verb could be *set on*, the non-affected is *annual limits* and the affected is *coverage*. However, what is set on could affect whether it is a good or bad action. Thus, we don't consider such case.

5 Writer's Attitude

The second phase of annotation is to mark the **writer's** attitude toward the agents of gfbf events and influencers and the and objects of gfbf events. Specifically, in the sentence that includes the gfbf, you should mark whether there is a positive or negative attitude of the writer communicated/revealed in that particular sentence.

5.1 Quick Examples

Let's first see an example.

1. Luckily, John saved Mary.

From the word *Luckily*, we could say the writer has a positive attitude in this sentence, specifically speaking, towards the event of John saving Mary. Since the action of *saving* is goodFor Mary, the writer has a positive attitude towards Mary. Moreover, since John is the agent of this action, the writer might have a positive attitude towards John, too. Thus, we mark the attitudes towards *John* and *Mary* both as positive.

Actually, when you're reading a real document, there inferences may be done in one second in your mind. This is similar to ,when reading a novel, figure out who the writer prefers, and who the writer dislikes.

Another examples from the corpus:

1. Jettison any reference to end-of-life counselling. (hc002)

The writer is arguing that you should get rid of any reference to end of life counseling; he's negative toward end of life counseling.

5.2 Don't "over" use your world knowledge

See the sentence below:

1. You don't need a Ph.D. to see that the promise to expand coverage and reduce costs is a crude deception, or that cutting \$500 billion from Medicare without affecting care is a fiction.

It's not difficult to find several goodFor/badFor in this sentence:

- 1. expand coverage
- 2. reduce costs
- 3. cutting \$500 billion from Medicare
- 4. without affecting care

By common sense, we know coverage, care, Medicare are usually good for ourselves and almost everyone wants to enjoy medicare without much costs. However, what the writer wants to express in this sentence is that: the good-For/badFor we lists above are all lies. There is no obvious attitude towards the goodFor/badFor. If you were to mark expand coverage, reduce costs - then you would be using general knowledge that these are desirable. Marking those is not the goal of this specific annotation task.

Thus, we should annotate attitude as "none" for the objects in the sentence above.

Thus, we want to be able to find sentences that reveal the speaker's attitude within the sentences.

Note that even the writer thinks the goodFor/badFor are lies, we still mark them. Remember the section Insubstantial goodFor/badFor.