## **Guidelines for Figurative Language Annotation on Tweets**

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#### 1. Introduction

The goal of our project is to annotate a tweets corpus and distinguish whether a tweet is literal or figurative, and if figurative, the figure of speech used will be labeled. We will be considering the overall meaning of the full tweet, rather than considering the tweet on the lexical or sentence level. This document describes the guidelines for this annotation project. In the next section, detailed explanation on the chosen set of tags and examples for each category will be provided.

## 2. Tagset description

## 2.1. Literal tag

If a tweet is not using figurative language, we will label it literal, in essence that the meaning of the tweet as a whole is the same as its stated meaning. If an annotator feels that they have enough context, and that the tweet does not have a meaning different from what is conveyed (literally) in the tweet, then it should be labeled literal. This is an example of a literal tweet:

got to the subway and realized I left my jacket at work... with my metrocard and keys in the pocket. #winning #not #ineedwine

The meaning of the tweet is exactly what is stated. The annotator might be tempted to see the "#winning #not" as sarcasm. However, since "#winning" is not conveying the meaning of the tweet as a whole (that the things were left) and more commenting on it, and the scope of #not applies only to the hashtag #winning (and not to the entire tweet), this tweet should be marked as literal.

An additional complexity that will occur with literal tweets is that some tweets will be describing a situation that is ironic, but not actually using irony/sarcasm in the tweet. For example:

No one knows who invented the fire hydrant because the patent burned in a fire. #FunFact #irony

#irony "@reason247: NSA Says It Can't Find E-Mails Where Snowden Expressed Concerns About Controversial Surveillance Programs"

While the events in the tweets may be described as ironic, which may be thought of as figurative, these tweets are not using figurative language. The meaning of the tweets are exactly what is stated, so these should also be labeled as literal.

## 2.2. Figurative tags

Figurative language is language that uses words in ways that deviate from their literal interpretation to achieve a more complex or powerful effect. For the figurative tweets, the following set of tags will be used:

#### 2.2.1. Sarcasm

In sarcasm, what is being said is the opposite of what the speaker actually means. The literal meaning is different form what the speaker says through sarcasm, often with satirical or ironic remarks and a purpose to amuse or hurt someone or some section of the society. In detecting whether a tweet is being sarcastic, the hashtag of the tweet, such as the #Not can be helpful. The following tweets are examples of tweets labeled with the sarcasm tag:

Having to run to the train first thing in the morning is a great way to start the day #not

It didn't work the first 100 times, it makes so much sense to try it again! #Not

One thing that we need to pay special attention to about this tag is that sometimes the tweet is self-tagged sarcasm or irony, but if the tweet is merely describing an ironic situation like the following example, then it should be tagged as literal instead of sarcasm.

\* Just happened for real. Mom tells daughter to watch where she is going as her eyes are glued to her iPhone. Both walking. #irony #applestore

## 2.2.2. Hyperbole

Hyperbole is a deliberately exaggerated statement that is not meant to be taken literally.

Below are some examples extracted from the tweets that are labelled as hyperbole:

Literally, I'm about to offer up my first born child just to the stress gods. #breakingdown#gradschool #finals #happybirthday #not

@zznate here's the irony. I ripped out my lawn a while back and put in rocks. That's how much I care. #not

Tonight's Pretty Little Liars episode will literally kill me! I am just so ready & excited. #HappyPLLDay

#### **2.2.3.** Simile

Tweets that contain a direct comparison or an analogy will be annotated with the simile tag. In order to be considered a simile, both elements of the comparison need to be explicit (see Metaphor tag). Words and expressions like *as*, *like*, *in the same way that* are a good hint of a tweet being a simile.

Some simile examples extracted from the corpus that should be annotated as simile:

Consumerism is used to control the populace in the same way that the proverbial carrot is used to control the proverbial horse.

A racist NBA owner makes about as much sense as a homophobic theater producer.

## 2.2.4. Metaphor

A metaphor is an implicit or hidden comparison between two things that are unrelated, but share some common characteristics. Both metaphor and simile are similar because comparison is at the core of both figures. The main difference between them is that in similes the comparison is explicit (both the element we are describing and the thing we are comparing it to are present), whereas in metaphor this comparison is implicit. Therefore, words like *as*, *like*, *in the same way that* will not appear in metaphors.

It is important to note that, although many words in everyday language are metaphorical or were metaphorically in their etymology (*prices rise*, *time spent*, etc), we will not annotate those as metaphor. The metaphor tag is only concerned with metaphor as a figure of speech for the entire tweet. Therefore, no metaphors will be annotated if they only apply to the lexical level or only apply to one item on the tweet (or to their etymology). Only full rhetorical metaphors that apply to the entire content of the tweet shall be annotated.

Some metaphor examples extracted from the corpus that should be annotated as metaphor:

When u allow people to control u and/or ur emotions, u then become a puppet & they will pull ur strings whenever they like..... #not #here

Today's lesson learned: before you go blaming the shit smell on your dog, you'd better check your own shoes first. #metaphor & #notametaphor

RT @daniloxxv: "UKIP is the bastard child of the big three parties. With apologies to all bastards." - @PeterTatchell at the University of

## 2.2.5. Rhetorical question

A rhetorical question is a question that is not intended as a genuine inquiry, and that does not require or expect an answer. It is often used to signal the opposite of its literal meaning (similar to sarcasm) or to emphasize the perceived ridiculousness of a situation. For example:

Really hurting right now... How does one wake up feeling fine and acquire a hangover throughout the day? It #does #not #make #sense

Poor @adamlevine has acne and ADHD. Will the horror ever end? Can he get a break? #Sarcasm

.@GlennMoore7 I mean why would anyone want to help that particular charity if it was not for their own gain?!#sarcasm independent.co.uk/sport/football...

These tweets are considered to be using figurative language because the literal meaning would be that the tweeter is asking a genuine question about the specific subject (hangovers, Adam Levine's personal problems, giving to charity) but the actual meaning in each case is that the situation described is a ridiculous situation.

However, not all tweets containing a rhetorical question would be labeled as such. Rhetorical questions can often be used as tag questions or asides within a tweet, while not key to conveying the overall meaning. For example:

Wanna know something? I hate studying for exams. #shocker #not

While this tweet is using a rhetorical question, the overall meaning is conveyed in a literal statement, so we would label this tweet as literal, and not figurative, so it would not get this label.

#### 2.2.6. Other

Cases will be marked as other if although they should be considered figurative (they convey a meaning that is not the same as the stated meaning), but they do not fit within the labels: Sarcasm, Hyperbole, Simile, Metaphor, or Rhetorical question.

Here is an example of a tweet that belongs to this category:

Anyone up for a swim? I got my pool in the backyard inflated today! #SouthCountyProblems #NOT #Swimming

This tweet is figurative because it means something other than the surface meaning. However, it does not fit into any of the other categories, so it should be labeled as other.

## 2.3. Not enough context tag

Figurative language in heavily context-dependent. Even humans can find it hard to tell if a given utterance is literal or not. This is particularly frequent with tweets: in many cases, the tweet is too short, lacks crucial information (the previous tweet, the attached image or gif) or there are anaphoric mentions that are not contained in the tweet itself. This will make it impossible to know if what is being said is literal or not. We propose to annotate this type of tweets with the tag *Not enough context*. We consider that knowing that a certain utterance is ambiguous even for a human is valuable data that should be kept for training and documentation purposes.

Some examples of ambiguous tweets extracted from the corpus:

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@dazelleyvette: @ShoulderPadGal hey there.... I am now great with Twitter yet.
Getting there R u sure? Lol! ;-) #Not
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"@dkatzmaier: Spotted on the CNET giveaway counter. #irony twitpic.com/e50140". HAHAHA!! But nobody's taken it tho??

## 3. Degree of certainty

Some tweets are very straightforward to annotate. Others, however, can be more problematic and edge cases can arise. We propose that all the previous tags should have an attribute that expresses the degree of certainty that the annotator has on their annotation for every tweet. We propose three possible values for the *certainty* attribute:

- certainty = 1: the annotator is totally confident about the tag.
- certainty = 2: the annotator is somewhat confident but not totally sure about the tag.
- certainty = 3: the annotator is quite unsure about the annotated tag.

If the annotator is extremely unsure on how to annotate the tweet, we then suggest using either the *Other* tag (if he/she is confident about the tweet being figurative, but unsure about what subtype) or the *Not enough context*.

## 4. Overlapping examples and edge cases

Sometimes a given tweet can contain several rhetorical figures at the same time. For instance, a sarcastic remark followed by a rhetorical question; or a metaphorical tweet that is also a hyperbole.

In general terms, there will be one figure that dominates the tweet. This figure will be the one that cannot be erased from the tweet without the tweet substantially changing its meaning. We suggest annotators to choose whichever category seems dominant following this criterion. For example, in the following tweet a rhetorical question (*But who had the bright idea of doing a leg/butt workout the day before my longest run?*) is followed by a sarcastic comment (*what a good idea*).

But who had the bright idea of doing a leg/butt workout the day before my longest run? Oh, it was me, what a good idea #NOT #OUCH #DOMS

The core of the tweet is the rhetorical question, as it is the part that is the longest and that contains the main meaning of the tweet. Deleting the question would dramatically change the meaning and intention of the tweet, therefore we consider rhetorical question the dominant figure of the tweet and should be annotated as such.

In addition, in order to be able to tell the difference between all the possible categories, we propose the following tree graph that can help annotators decide how to annotate a tweet.

## 5. Decision tree for making annotations

The following is a decision tree showing the steps that an annotator might go through in order to find the appropriate label for a tweet. At each step, the annotator should consider what the overall meaning of the tweet is, and how that meaning is being conveyed. At the first step, they will decide if the tweet is using literal (non-figurative) language to convey meaning, if it is using figurative language, or if there is not enough context to make a judgement. If the annotator thinks that the tweet is figurative, they should follow the flow chart to reach the label that best fits the tweet. When a final label is chosen, they should also apply their degree of certainty to the label.

