# **S1.** Full Keyword String of References to US 2016 and 2020 Presidential Elections

Note: The keyword string consists of two lists of carefully validated terms and collocates relating to (i) the topic of elections in general and (ii) specific references to the to the 2016 and 2020 US presidential elections including the major candidates and other important entities. For a text to be selected it has to include at least one term of each list (i & ii). Within each list, it uses the syntax used by the authors’ script (https://github.com/XX/XX): Every search term begins with the keyword that is recognized, followed by optional criteria of terms that must be found or not found within a specified distance. “\_” separates disambiguation criteria blocks; “y()” marks terms that must be found, “n()” marks terms that must be absent, “~” marks the maximum distance from the keyword; other operators are: “|” – Boolean OR; “&”: Boolean AND; “\*”: unspecified alphabetical characters (i.e., non-space/punctuation). For the resulting list of terms, see the separate file elections\_filter.txt, which contains two entries: #GENERAL\_ELECTIONS\_TERMS for the terms related to the topic of elections in general, and #US\_ELECTIONS\_ENTITIES for the terms and relating specifically to the 2016 and 2020 US presidential elections.

# **S2.** Full Keyword String of Potential Future References

Note: The future references dictionary comprises a wide range of grammatical tense markers, references to prediction and future-oriented speech, as well as other markers of semantic future-orientation (Authors, 2016). The keyword string uses the syntax used by the authors’ script (https://github.com/XX/XX), see above in S1. For the resulting list of terms, see the separate file future\_dictionary.txt.

# **S3.** Full Keyword String of Positive and Negative Sentiments Used in the Pre-Classification

Note: The sentiment dictionary is a modified list of keywords derived from the Lexicoder (Young & Soroka, 2012) and Hu and Liu (2004) sentiment dictionaries. We removed words or phrases that appeared highly unlikely to be used to evaluate an object (e.g., “tasty” hardly constitutes a valid evaluation of a policy). Since the original dictionaries listed several words as both positive and negative, we decided for each such indicator which was the more relevant evaluative tendency, ensuring that every indicator was included exactly once, marked as either positive or negative, in the joint dictionary. For the resulting list of terms, see the separate file sentiment\_dictionary.txt, which contains three entries: #POSITIVE sentiment, #NEGATIVE sentiment, and #NEGATORS. Any recognized term preceded by a negator would be attributed to the respective opposite sentiment.

# **S4.** Guidelines for Manual Classification of Evaluations of Political Predictions in the context of the 2016 and 2020 US Presidential Elections

**INTRODUCTION**

Hello, and welcome dear coder to our first coding task. In this task, we use manual coding to identify and classify political projections in text documents from various media sources and outlets. We will shortly give you some more details about the general conceptual framework. While our main goal is much broader and encompasses various components and sub-components, we will start in this first step with a narrowed task, namely to identify in short text segments predicted states and evaluations, and to decide whether they are associated with each other.

Do not worry if most of this still sounds strange to you! We proceed step by step, and soon you will become an expert in coding political projections in political discourse. We start with a preview of our general conceptual framework (1), then come to a definition of predicted states, and evaluations of predicted states, our two concepts in focus here (2), and finally coding instructions for our first coding task (3.1 & 3.2).

**1. CONCEPTUAL FRAMEWORK OF POLITICAL PROJECTIONS**

Political projections are scenarios about the expected outcomes and implications of political events, such as elections, referenda, crises, and wars. Much previous work has focused on the challenges and cognitive biases associated with the attempt to accurately predict the future (e.g., (Kahneman, 2011; Silver, 2012; Tetlock & Gardner, 2015). However, the attempt to get it right is not the only motivation for projections. For instance, future scenarios encapsulated in campaign slogans such as “Bibi or Tibi” (a Likud slogan juxtaposing Netanyahu and an Arab-Israeli politician) or “Kahol Lavan or Erdoğan” (a Blue & White [Kahol Lavan] slogan likening Netanyahu to the Turkish president) portray binary future outcomes that play to the fears of the respective parties’ constituencies for purposes of voter mobilization. Moreover, projections can affect political reality regardless of whether they are accurate: they can propel political action aimed at bringing about desirable futures or avoid undesirable scenarios, and sometimes trigger self-fulfilling and self-defeating dynamics (Merton, 1948; Authors, 2018). Consequently, projections can be conceptualized as dynamic discursive constructs with social implications.

Projections center upon the expected outcome (Predicted State), qualified by its estimated likelihood (Probability), as well as its desirability (Evaluation). Furthermore, expected outcomes may be warranted by specific considerations (Anchors) and imply suitable responses (Behavioral Implications). To speak of a projection, a predicted state is required. Each projected state can be qualified by both its probability and its evaluation, but these qualities may also remain unspecified. Any projected state can be justified by none to multiple anchors, and raise none to multiple behavioral implications.

**PREDICTED**

**STATE**

**Anchors**

**Behavioral Implications**

**Probability**

**Evaluation**

**2. PREDICTED STATES & EVALUATIONS OF PREDICTED STATES**

In our first task, we start with identifying two main components, predicted states and evaluations, and their association to each other. We briefly define each component.

**What are predicted states?**

Predicted states are any statements asserting a belief about a future state of the world that is still uncertain and unknown to the speaker.

The predicted state refers to the expected outcomes of future events – e.g., who will win the elections, or how will the elections affect the economic situation in the years to come. From a discursive perspective, the predicted state can be viewed as an assertive speech act that expresses a belief in a future state of the world. As such, it differs from other future-oriented speech acts (e.g., promises, calls for action), which express a desire for specific future states (Kampf, 2013; Searle, 1979; Stalpouskaya, 2019). Predicted states may refer to specific outcomes within a pre-structured set of possibilities (e.g., the winning candidates, allocation of seats in parliament), or lay forth open-ended scenarios (e.g., about the security situation in Israel); they may pertain to fixed points in time (e.g., election day), or to an indefinite future (Authors, 2016) (please refer to I.1 for identification criteria and typical expressions of predicted states).

**What are evaluations of predicted states?**

Evaluations include any explicit or implicit assessments of the desirability of the predicted state. As you can imagine, not every predicted state is necessarily evaluatedas desirable or undesirable. For example, “Hillary Clinton will certainly win the elections” entails a predicted state, but not an evaluation. But when there is an evaluative component, it says something about the desirability, or undesirability, of the projection, such as in “I would be so happy if Hillary wins the elections”.

In other words, evaluations are expressions which convey a “speaker or writer’s attitudes or stances towards, viewpoint on, or feelings about the entities or propositions that he or she is talking about” (Thompson & Hunston, 2000, p. 5). In our task, we focus only on evaluations of predicted states, while other entities or propositions are not in focus.

People can evaluate future scenarios as positive (desirable) or negative (undesirable) for themselves, their communities (their family, political camp, country, the human race), or for others (e.g., opposing parties, specific political actors). In addition, evaluations can foreground normative considerations (i.e., whether the predicted state satisfies specific values), interest-based assessments (e.g., whether it serves an actor’s aspirations, e.g. “for Bibi it would be profitable if he can seize a comfortable majority”), or affective evaluations (i.e., how a person feels or expects to feel about the predicted future; “affective forecasting”; see Authors, 2022; Wilson & Gilbert, 2003).

Here we only focus on the tendencyof the evaluation (i.e. is the predicted state evaluated as desirable or undesirable), irrespective of the viewpoint (i.e. desirable for whom?), or the base of an evaluation (i.e. desirable on what grounds?). These aspects will be analyzed in later stages of the work. (please have also a look at I.2 for further identification criteria and typical expressions of evaluations).

**3.1 FIRST CODING STEP: IDENTIFYING PREDICTED STATES (Q1)**

In this first coding task, you will receive from us a set of text segments that contain three sentences, out of which the **>>> core sentence <<<** is in focus, whereas the two surrounding sentences give some more context. These segments are drawn from longer text documents from various media sources and outlets, which deal with the topic of the US Presidential Elections in the years 2016 and 2020.

We sampled these segments based on the presence of (a) future-related keywords (as possible indicators for the presence of predicted states), and (b) sentiment words (as an approximation to evaluations).

In our first coding task, we classify whether the core sentence contains one or several predicted states. In our second coding task, we classify whether the highlighted sentiment term is used to evaluate a predicted state in the core sentence. We will explain each step in detail.

Please first read the entire text segment, and try to understand its meaning. If more context is necessary, click on the link in the first column that directly leads you to the full document.

Now, look again at the segment: Does the **>>> core sentence <<<** entail one or several predicted states? Please read carefully the definition of predicted states above. In addition, read the criteria and examples for predicted states that we provided in the appendix.

**CODING QUESTION: Does the >>> core sentence <<< contain one or several predicted states?**

**In the column Q1**, please indicate one of the three following numbers:

1. **No, the core sentence does not contain a predicted state.**
2. **Yes, the core sentence contains one or more predicted states.**
3. **I don’t know if the core sentence contains a predicted state (please specify why)**

**3.2 SECOND STEP: IDENTIFYING EVALUATIONS OF PREDICTED STATES (Q2)**

In this step we classify whether a given highlighted sentiment [term] is used to evaluate a predicted state.

In quantitative text research, evaluations are often approximated via the usage of sentiment words. Sentiment words are often collected in long word lists called “dictionaries”, that try to measure the “tone” or “emotions expressed in text” in very big text corpora (sometimes more than a million text documents). Weuse sentiment wordsfrom two distinct dictionaries (Hu & Liu, n.d.; Young & Soroka, 2012) and merge them into one combined list containing 6.407 positive (e.g. ‘great’ or ‘wonderful’) and 9.101 negative sentiments words (such as ‘horrible’ or ‘nasty’).

While sentiment words are good candidates to contain evaluations, they are not identical with them. In fact, one and the same sentiment term could sometimes evaluate a predicted state, and in another context be irrelevant.

For example, “Trump feels revitalized and he is confident that he will be the Republican candidate in four years again” contains two sentiment terms (revitalized; confident), but zero evaluations. In another context, these two words evaluate a predicted state: “Trump’s victory will revitalize our economy and restore our national confidence”. In this case, both revitalize and confidence clearly express desirability of the predicted state.

Similarly, “The latest election polls caused confusion, therefore predictions are difficult” entails two sentiment markers (confusion; difficult). However, these markers don’t indicate a desirability of a predicted state. In contrast, “A repeated failure of coalition talks would lead us into a state of confusion, and create a difficult situation for our country” contains the same sentiment terms used to express undesirability of the prediction. The latter sentence actually contains a third sentiment word (failure) but again without evaluative usage.

While a predicted state’s desirability can be explicitly expressed via a speakers’ act of evaluation (e.g. “It would be great if X wins the elections.”; “I think that X’s victory would be the best for our country.”) in other cases the desirability is expressed via positively or negatively connoted events (e.g. “This is going to be a disaster for our country.”, “This will lead to the collapse of our economy.” “Workers will likely suffer”). In the case of positively or negatively connoted events, one single term can express both the predicted state, and the evaluation of it (e.g. “The country will end up in another state of crisis.” 🡪 the term “crisis” is both the predicted state, and an explicit expression of the undesirability of the predicted state.).

Please first read the entire text slice, and try to understand its meaning. Now, look at the sentiment [word]. If more context is necessary, click on the link to see the full document.

(1) Is the **sentiment [word]** used in order to evaluate a predicted state in the **>>> core sentence <<<** in any way (either desirable or undesirable)? Please keep in mind our definition of evaluations of predicted states above. If there are multiple predicted states in the core sentence, the sentiment term fulfills its evaluate function if it is used to evaluate at least one of them.

(2) In addition, is the usage of the highlighted sentiment [word] **associated**, or **dissociated** from its original positive or negative tendency?

The usage of the sentiment is classified as **associated** if the usage corresponds to the original valence of the sentiment word. This is the case if

* a positive sentiment [word][+] is used to evaluate the predicted state as desirable or positive (e.g. “It would be great if Hillary wins the elections”); or
* a negative sentiment [word][-] is used to evaluate the predicted state as undesirable or negative (e.g. “It would be horrible if Hillary wins the elections”).

**The** usage of the sentiment is classified as **dissociated if the usage changes the original valence to its opposite tendency, usually by means of negation. This is the case if**

* a positive sentiment [word][+] **is negated in order to evaluate the predicted state as undesirable or negative (e.g. “One cannot be seriously happy about the prospective Trump victory”), or**
* a negative sentiment [word][-] **is negated to evaluate the predicted state as desirable or positive (e.g.** “no one will be unhappy if Trump loses”).

**CODING QUESTION: Is the highlighted sentiment [term] used to evaluate a predicted state in the >>> core sentence <<< ? Is the usage of the highlighted sentiment word associated, or dissociated from its original positive or negative tendency?**

In column Q2, please choose one out of the five following numbers:

1. **No, the highlighted sentiment term does not evaluate a predicted state.**
2. **Yes, the highlighted sentiment term evaluates a predicted state, and the expressed valence corresponds to the original valence of the sentiment term.**
3. **Yes, the highlighted sentiment term evaluates a predicted state, but the valence expresses the opposite of the sentiment term’s original tendency.**
4. **Yes, the highlighted sentiment term evaluates a predicted state, but its evaluative tendency is unclear.**
5. **I don’t know if the highlighted sentiment term is used or is not used to evaluate a predicted state (please specify why).**

Notes:

It is possible that the same text segment will appear in several subsequent rows. This happens when a segment entails more than one sentiment words. In this coding task, each sentiment word receives its own row and has to be classified. In such cases, your decision on the predicted state should be identical to your prior decision, while the decision on the new sentiment word needs proper consideration.

**Additional Specifications for the classification of PREDICTED STATES**

**DEFINITION**: Predicted states are any statements asserting a belief about a future state of the world that is still uncertain and unknown to the speaker.

**CRITERIA**: To qualify as a predicted state, statements can be re-formulated as “he/she predicts that X” without changing in meaning. The direction of fit is word-to-world, i.e., the truth of the statement depends on the future state of the world. They require an expressed belief in a future state, as well as some relevant amount of uncertainty in the sense that neither the speaker’s own actions, nor any other parts of the present that are known to the speaker, already control or determine the predicted future.

Any expressions that attempt to shape or prescribe a future state of the world to match the statements (e.g., desires, normative demands, agendas, calls for action) are excluded; likewise excluded are any attempts to characterize the future behavior of the speaker herself, of groups that the speaker exercises significant control over (e.g., plans, intentions; the prime minister cannot “predict” future governmental action as long as she can expect to shape it), and of any future states of the world that are already decided upon and known to the speaker (e.g., announcements, outcomes of ongoing trends and processes, others’ declared plans), even if she does not directly influence these. If a speaker speculates about a third actor’s plan, that may constitute a projection as it is not known what that actor will do; however, if the plan has already been announced, and is thus known, it cannot constitute a projection.

**EXPRESSION**: Predicted states require some form of direct or indirect future reference, which can take the form of future tense, but can also be expressed in different ways. Future-oriented statements that are qualified using markers of probability or limited certainty (“I think…”) almost always constitute predicted states. First person pronouns (I, We) in the subject position of active future-oriented statements (e.g., “I/We will…”) typically indicate that a predicted future is to some important extent controlled by the speaker, and hence not a projection, unless the activity that follows is such that one can clearly not control it (e.g., “we will win” is a prediction, as winning is not controlled by the speaker). By contrast, their appearance as objects (e.g., will benefit us) or in passive statements (e.g., we will be screwed) likely indicate predicted states. Subjunctive modal verbs (could, might,עלול ,עשוי) or expressions of hope, anxiety or fear in relation to future-oriented expressions tend to indicate predicted states, unless these are used in a prescriptive sense (e.g., they should; one can only hope that).

The use of present progressive tense in relation to the future state typically indicates that the described state is to some important extent controlled by the present, and thus not a predicted state (e.g., trends and ongoing processes; “a blue wave is forming”). Projections made in the past are considered only if the predicted state still lies in the future and is still undetermined; references to past projections about events that have already passed are not considered.

Predicted states can be expressed quantitatively (e.g., polls predicting the number of expected mandates for each party) or in narrative form.

As all elements, predicted states can appear in lists or chains of dependent predictions, possibly conditional upon one another, which are treated as part of the same projection only if they constitute part of the same scenario, and otherwise regarded as separate projections. Many expressions of predicted states simultaneously express parts of the other projection elements (notably, evaluation by means of connoted lexical choices; probability by means of modality), and are then classified toward all elements touched upon.

Future-oriented expressions that do *not* suffice to indicate projections include desires (“I want her to win the elections.”); normative demands (“She should win the elections, that’s the best for the country.”); calls for action (“We need to make sure that she wins the elections.”); plans, promises and intentions (“We will work hard to ensure that everyone gets his vaccine”; distinguishing criterion here is that the speaker has control over the outcome, so she is not predicting but promising); announcements (“In two weeks Israel will receive the first batch of vaccines”; distinguishing criterion is that the speaker has knowledge of decisions about the future that have already been made, so she is not predicting but informing); and past projections (“We were absolutely convinced that Hillary Clinton would win the elections, and then we were shocked.”)

Additional specifications:

[I.1] Questions: Future speculations that are formulated as questions (e.g. “Will Trump win the elections?”) are not coded as predicted states. A predicted state requires some assertiveness about what a speaker believes will happen, which is exactly what is lacking in the case of questions. However, if an answer follows such a question, then the answer to the question becomes a predicted state (e.g. “People ask us if Trump will win the elections. I personally don’t think so.”)

[I.2] Surveys and opinion polls are not necessarily indicators of predicted states. For example, “a recent PEW survey found that 90% of voters prefer Clinton over Trump” only expresses a present state and does not make a prediction. However, the sentence “a survey found 90% voters will vote for Clinton” is a predicted state because it makes an explicit assertion of the future (“will vote for”). The same counts for survey results that show statistical correlations between groups and present or habitual behavior, e.g. “a recent survey shows that conservatives are more likely to go to church once a week and to have a higher income than liberals” are not predicted states. However, the sentence “Conservatives are more likely to vote for Trump” would count as a predicted state.

[I.3] General assertions with high certainty: Predicted states can be formulated with high certainty and sometimes appear as almost logical rules (e.g. “the recent tax increases will particularly affect population with lower income”). Such statements count as predicted states as long as they indeed are assertive statements about the future. According to our approach, even "the sun will rise tomorrow" qualifies as a predicted state because (a) one can never be 100% sure, something else could happen and (b) one is not in control over the outcome.

[I3.1] General rules that are often formulated with modal verbs (such as can, should, must…) are sometimes indirectly used to express a predicted state. The context needs to give explicit indicators that the rule is indeed used to predict something. E.g. the sentence “you can’t pretend to be a genious, either you are it or you’re not” can be used to predict that someone will not achieve his aspired scientific career (then it is coded as a predicted state), or it can be used to explain an event that already happened in the past, e.g. why a person failed in his latest physics exam (then it is not coded as a predicted state).

[I.4] Commitments to future assertions: Predicted states require some degree of commitment about what a speaker believes will happen in the future. From the universe of available outcomes, a speaker has to commit that one, or several options, are more likely or possible to occur than others, thereby reducing the number of possibilities of what is going to happen. E.g. “In the end, somebody will win, either Trump or Clinton” is not a prediction since the speaker has not chosen one out of two available options to be more likely than the other. However, if the statement occurred during or even before the election primaries, before Trump and Clinton have been nominated as presidential candidates, it would count as a predicted state, since it would be a commitment to two out of various other available possible or likely outcomes.

[I.5] Counter factuals (constructed scenarios that are contrary to what actually happened) are not predicted states *unless* they are used to formulate a predicted state. Therefore their relevance needs to be decided in its context. For example, “He committed crimes that anybody else would be in jail for” is not used to formulate a prediction since it refers to the past and present (… but he didn’t end up in jail). However, the example “If he wasn’t the Prime Minister they would come and arrest him” contains a predicted state since it expresses unlikelyhood of the police to come and arrest him (… but since he is the PM they won’t come).

[I.6] References to predictions in the core-sentence: If there is a reference to a prediction in the core sentence, then the core sentence becomes a predicted state as well, e.g. “There is a chance that he will eventually win. >>> This possibility for many is a doomsday scenario. <<< or: >>> If this happens it would be a horrible outcome for our country <<< (…).”

(I.7) Past projections: Past projections are generally not relevant (PS=0). Past projections are predicted states that relate to events in the past (that already happened within the temporal context of the article). Hence “She believed that Hillary will win” (and she knows that she didn’t because the elections took place already in the temporal context of the article) should be coded as PS=0. However, “Trump said last week that he will win the elections” should be coded as a predicted state (PS=1) if the elections (within the temporal context of the article) are still in the future.

Additionally, if a past projection was discardet or modified into another explicit projection, then only the new projection is relevant (e.g. “We believed that she will lose, but now we believe that she will win”) only the second part (we believe that she will win) constitutes a PS.

**Additional Specifications for the Manual Classification of EVALUATIONS**

DEFINITION: Evaluations include any explicit or implicit assessments of the desirability of the predicted state.

People can evaluate future scenarios as positive (desirable) or negative (undesirable) for themselves, their communities (their family, political camp, country, the human race), or for others (e.g., opposing parties, specific political actors). In addition, evaluations can foreground normative considerations (i.e., whether the predicted state satisfies specific values), interest-based assessments (e.g., whether it serves an actor’s aspirations), or affective evaluations (i.e., how a person feels or expects to feel about the predicted future; “affective forecasting”; see: Authors, 2022; Wilson & Gilbert, 2003).

Examples:

“I will be happy if this will happen.” 🡪 “Happy” expresses the speaker’s perception of the desirability of the prediction.

“I hope that he will not become future president.” 🡪 “Hope” expresses the speaker’s personal view about the desirability of the prediction.

“For us a Trump victory would be amazing.” 🡪 “Amazing” expresses the speaker’s desired situation for his community, while “victory” evaluates the predicted state as desirable from Trump’s perspective. (see also II.2 for additional specifications on election-related predictions and II.7 for the question of multiple perspectives)

“Biden prefers a more passive campaign, this might eventually cost him the victory.” 🡪 Here the sentiment “cost” expresses that the predicted outcome would be undesirable for Biden. Victory evaluates the predicted state as undesirable (for Biden), because from the context we know that it is a negation of a positive event (see II.10 for negated evaluative projections). All the other sentiment terms (prefers; passive) do not evaluate the predicted state.

“Such an outcome would be the best for our country.” 🡪 Here the sentiment “best” expresses a desirability of the predicted state based on normative considerations.

“Netanyahu’s crisis management is catastrophic, and yet he will be re-elected.” 🡪 Here, the sentiment term evaluates a present state (Netanyahu’s current crisis management), but one can infer a negative evaluation of the predicted state (“he will be re-elected” is undesirable).

Examples for dissociated usage of sentiment words:

“Such an outcome will be the opposite of adorable.”; “I certainly do not wish for his victory.”; “No one can seriously hope for his re-election.” “He would be the last to feel sorry about this scenario.”

Additional specifications:

[II.1] Multiple speakers referring to one predicted state: **Predicted states and evaluations can be related although they are expressed by different speakers, e.g. if one speaker expresses a predicted state (“I think X will win the elections”) and another speaker concurs and evaluates it (“I agree, and this would be amazing.”). The important thing is therefore that both speakers refer to the same predicted state.**

**[I**I.**2] Election-related positive or negative predictions:** Predicted states which are related to specific election outcomes (in particular winning or losing the elections) do count as evaluations, (other indicators: “losses” “victory” “gains some seats” “defeat”). In the example: “Trump’s [victory][+] is almost certain” the term “victory” will be coded as (EVA=1) since such an outcome can be interpreted as beneficial or favorable for Trump. If the predicted election outcome is additionally evaluated from a second perspective, both perspective will be coded and interpreted separately (see also II.7 different perspectives). E.g. “We [hope][+] that he will [lose][-] the elections” contains two different perspectives: We code “hope” as (EVA=1, PS evaluated as desirable for us) and “lose” as (EVA=1, PS evaluated as undesirable for Trump). Additional Note: If "winning" or "losing" (or other electoral victory/loss related words) appear outside a core sentence, and they project the same outcome as in the core sentence, then we also code them as evaluative (desirable or undesirable for X).

[II.3] Decision on the associated and dissociated usage of sentiment words: To decide whether a sentiment word is associated or disassociated from a predicted state, the directionof the predicted state plays an important role.

* In the example “Trump is a [[racist]][-]. >>>He is not going to win the elections.<<<” the sentiment word “racist” is used to evaluate the predicted state (of Trump *not winning* the elections) as desirable, therefore coded as dissociated evaluative usage (=2).
* In the opposite example “Trump is a [[racist]][-]. >>>However he is likely going to win the elections.<<<” the same sentiment word “racist” is used to evaluate the predicted state (of Trump *winning* the elections) as undesirable, therefore coded as associated evaluative usage (=1).

[II.4] Sarcasm: Sarcasm and irony are problematic phenomena for text analysis, because they convey that a speaker’s expressed content means exactly the opposite of what they say. If there are signs within a text segment that a speaker’s evaluative usage of sentiment words is sarcastic (e.g. “this is going to be [great]” although one can tell that he actually means the opposite), then we code evaluative tendency as unclear (=3). If the segment has additional, explicit markers of the speaker’s actual opinion (e.g. “this is going to be [great]…. Not!”) then we code the actual meant evaluative tendency, in this case disassociated evaluative usage (=2).

[II.5] Indirect evaluations of predicted states: In many cases, speakers express the desirability of a predicted state indirectly. In the example “Trump is a [racist][-]. However there is a good chance that he will win” the word “racist” technically evaluates the present but we can deduce that the fact that Trump is now a racist also implies that he will be a racist if he wins the elections. To decide whether a word that technically evaluates something else than the predicted state (but indirectly seems relevant) should be coded, consider whether there is a way to rephrase the predicted state in a way that a) brings in that word such that it is then about the future and b) maintains the same meaning. For instance in “Trump is a [racist][-]” one can easily rephrase to say that “there will be a racist winning”, there is a racist in the future and thus it counts; by contrast, if we rephrase “a person who broke the law will not be allowed to continue campaigning”, “broke” is still about the past (also in the future she will be a person who broke the law, so it does not count 🡪 The fact that she broke the law once does not allow us to deduce that she will break the law in the future again).

[II.6] The replacement test aka “which sentiment words should be annotated?”: A lot of sentiment words can have different meanings and functions depending on their context and usage. A house for example can look “abandoned” thereby expressing a negative evaluation about the house, and people can “abandon” a specific path or policy, which does not in itself express any evaluation. The replacement test helps us to decide over evaluative usage of a word: If a sentiment word can be expressed by a neutral word without changing its meaning it indicates non-evaluative usage of a sentiment word. In the latter example, people could also “drop” or “change” a path and policy, the replacement of abandon by alternative neutral words hence did not change the meaning, whereas if we replaced an “abandoned” by a neutral description such as “empty” then it would change its meaning. You can also think of it as a removal test: In the sentence “British people are not yet [ready][+] to [leave][-] the European Union, and yet this is what is going to happen [unfortunately][-]” by removing the word “unfortunately” the sentence would entirely lose its evaluative tendency and become a neutral descriptive sentence, therefore additionally revealing that “ready” and “leave” are not used to evaluate a predicted state.

[II.7] Different perspectives: Sometimes, one and the same snippet can entail multiple perspectives that differ in their evaluation of the desirability or undesirability of the predicted state. Perspectives can usually be thought of in a “good for / bad for X logic”. In our coding approach, we generally do not decide which perspective dominates over another. For example, “the latest election polls predict a slight majority for Netanyahu. This is [good][+] for Netanyahu, but the opposite of [good][+] for us.” has two competing perspectives (Netanyahu and Us/We). In such cases, we code the evaluative tendency according to the perspective of the actor who is directly related to the sentiment word. In this case, we therefore code “good” = 1 (desirable for Netanyahu) and “the opposite of [good]” = 2 (undesirable for us). Similarly, “the governmental decrease will make the country more [attractive][+] for foreign investments. This is a [disaster][-] for our own national economy.” has two competing perspectives (the foreign investor’s perspective and our own). Hence we code “attractive” as 1 (desirable for foreign investments) and “disaster” as 1 (undesirable for us). The same counts for the following examples: “Such a catastrophe[-], would be [beneficial][+] for Netanyahu” (=1;=1) “The [problem][-] is that big hedge funds will be [thrilled][+]” (=1;=1). Even evaluations that are stated as adjectives may be coded according to different perspectives, e.g. “Trump’s [undesirable][-] [victory][+] is still an option.” 🡪 Here we would code “undesirable” (EVA=1), marking undesirability from the journalist’s perspective, and “victory” (EVA=1) marking desirability from Trump’s perspective.

[II.8] Conditional projections and evaluations (changed): In conditional sentences only the main clause (without if) constitutes the actual predicted state. For example, “If Bibi [wins][+], the economy will [prosper][+]” predicts that “the economy will prosper”. “Bibi wins” is not the prediction because it is part of the conditional clause (with the if). Accordingly, only sentiment words that evaluate the predicted state (in the main clause) are relevant. In the same example “If Bibi [wins][+], the economy will [prosper][+]” “wins” should be coded (EVA=0) because [wins][+] relates only to the conditional clause and not to the predicted state itself (that “the economy will prosper”). [Prosper][+] does relate to the predicted state, so it should be coded as (EVA=1). It evaluates the predicted state as desirable (projecting something desirable).

[II.9] Hope, hopeful: “Hope” “hopeful” “looking forward” are often words that encapsulate both the predicted state (expressing the expectation of something) and the evaluation of the predicted state (expecting something desirable to occur). E.g. “Hillary Clinton is [hopeful][+] about the outcome of the elections.” is a predicted state (PS = 1) because she has a positive expectation about the outcome, and hopeful should be coded as EVA = 1 (because she expects the outcome of the elections to be positive or desirable from her position).

[II.10] Evaluations of negated projections: If a projection is negated then this has implications for the direction of the evalaution as well. For example “It is likely that she doesn’t [win][+]”. Here we code “win” as (EVA = 2). Because she does not win is undesirable for her. Another example: “We hope[+] that there won’t be a political [crisis][-].” Here we code “crisis” as (EVA =2) because the negation (there won’t) turns the prediction into something positive (🡪 there won’t be a political crisis).

# **S5.** Explanations and Examples for Valid Disagreement among Coders

Object-specific evaluations are, as many relational constructs, often expressed in natural language in ways that raise ambiguities throughout the coding process. Authors (2023) specifically distinguish two sources of valid disagreement among coders that apply to our classification task.

1. Ambiguity, which arises when the textual data is insufficient to determine one specific reading. A common form of this phenomenon exists if speakers rely on Gricean (1984) communication norms to express relatedness by adjacency, for instance:

“These are [scary][-] times. >>> Well, I don’t expect he will win. <<<”

While it is plausible that the word “scary” may evaluate the winning prospect of the mentioned actor, it is equally plausible that it does not. Another example:

“Seventy percent of Americans believed he is a [racist][-] and a bigot. >>> You can’t run from those numbers and you can’t win the presidency with those numbers. <<<”

Here, there are once again two possible interpretations, depending on whether the second sentence is viewed as an extension of the first sentence or not. If we connect the two sentences, one could infer that perceiving the candidate as racist would be considered a negative evaluation, thus making his electoral loss desirable. However, if these sentences are read as relating to separate topics, the word “racist” does not constitute an evaluation of the candidate’s likelihood of winning. See for instance another case that exemplifies this ambiguity:

“He’ll quickly cut the head off ISIS and take their oil. >>> And he’ll stop illegal immigration by building a wall on our southern border that Mexico will pay for. <<< Donald Trump R, Presidential Candidate: We will make America [great][+] again!”

In this case, the segment once again does not explicitly provide a direct evaluation of the predicted state. However, one could interpret the inclusion of Trump's quote and his slogan of making America “great” again as a positive evaluation of the anticipated construction of a wall with Mexico. Conversely, it is also possible to view these two elements as distinct sentences, with the latter not serving as an evaluation of the former.

Another common form of ambiguity arises if the evaluative tendency of a given word is underspecified. This is the case in the following snippet:

“This all feeds that negative narrative and then you combine the Breitbart with his campaign, you defend it and say, listen, I want to expand my base. >>> You’re not going to expand your base, you are [[energizing]][+] it. <<< And there is not enough of that base to get him to the political end zone of the presidency. He only got 70 days left.”

In this example, the word “energizing” does contain some evaluative tendency, but it is not clear whether it is desirable or undesirable for Trump. While energizing is usually used to express something positive, in this context “energizing” is juxtaposed with “expanding” is such a way that the word “energizing” could also be interpreted as something negative.

2. Meaning multiplicity, which arises when the textual data cues multiple readings at once. One variant that we found repeatedly concerns different equally valid readings depending on which perspective is adopted. This is for instance the case here:

“>>> Trump New Attorney Admits Biden Won, Says Lawsuits Will Not [Work][+]. <<<”

In this example, one could interpret the prediction of an unsuccessful outcome of Trump’s lawsuits as both undesirable for Trump, or desirable for Biden. Both interpretations would be equally valid.

All of these cases share that there is neither one unique correct classification for the evaluative use of PETs (it is not true that they clearly evaluate, or do not evaluate, the object), nor can they be correctly captured by a multiple classification (e.g., not evaluative + evaluative, in inverted sense): They are ambiguous, and coders are correctly applying the codebook when they come to different decisions. It would of course be possible to force agreement in such cases by adding arbitrary rules (e.g., code evaluative uses whenever that is a plausible reading), but this introduces bias to the classification (in this case, an overestimation of evaluative uses). In our classification, these cases mean that there are fewer erroneous classifications that there is disagreement among coders, which means that reliability is higher than indicated by the agreement-based alpha coefficient.

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