

A large red square with a white border, centered on a white background. Inside the square, the text "Guidelines for Annotators: Discourse Questions" is written in white, bold, sans-serif font, arranged in four lines.

Guidelines for Annotators: Discourse Questions

Task Overview

- We wish to extract how **sentences relate to each other**.
- We want to extract **these discourse relations** by relating two events through a **question and answer** pair.
- Events can be related in various ways, for example **temporally or causally**.

He sprained his wrist. As a result he won't be able to play in the tournament.

- In this sentence we have, for example, the event of **someone spraining his wrist** and the event of **someone not being able to play in the tournament**.
- Here the most natural relation between the two is a causal one, e.g. the first event is the reason for why he won't be able to play:
 - Q: What is the reason he won't be able to play in the tournament?
 - A: He sprained his wrist.

The Annotation Process

The Annotation Process: 1 The context

- First you will be shown a small paragraph of text, like the following, for example:

Emotions are biological states associated with all of the nerve systems brought on by neurophysiological changes variously associated with thoughts, feelings, behavioural responses, and a degree of pleasure or displeasure.

There is currently no scientific consensus on a definition. Emotions are often intertwined with mood, temperament, personality, disposition, creativity, and motivation.

- In the paragraph you will see 2 sentences marked in different colors.
- These are the sentences you need to relate!
- Sentences that are not marked with any color are simply there for you to provide more context.

The Annotation Process: 2 Asking a Question

- After having read the text:

Emotions are biological states associated with all of the nerve systems brought on by neurophysiological changes variously associated with thoughts, feelings, behavioural responses, and a degree of pleasure or displeasure.

There is currently no scientific consensus on a definition. Emotions are often intertwined with mood, temperament, personality, disposition, creativity, and motivation.

- You need to think about how to ask a question that relates the two sentences.
- The way we create questions is by choosing a question start from a list of question starts:

After what, Before what, Despite what, Except when, Instead of what, In what case, In what manner, Since when, Unless what, Until when, What is an alternative to, What is an example of, What is contrasted with, What provides more detail on, What is similar to, What is the reason, What is the result of, While what, For what purpose, In addition to what, What describes the same as, What expands upon, What is a case of

The Annotation Process: 2 Asking a Question

Emotions are biological states associated with all of the nerve systems brought on by neurophysiological changes variously associated with thoughts, feelings, behavioural responses, and a degree of pleasure or displeasure.

There is currently no scientific consensus on a definition. Emotions are often intertwined with mood, temperament, personality, disposition, creativity, and motivation.

Despite what

- After having thought about which question start fits the best, you need to think which of the two sentences will be the answer and which will be part of the question.
 - In this case I choose the second sentence for the question:
 - **Despite what** is there currently no scientific consensus on a definition?
- As you can see we slightly modified the sentence to make the question grammatical.

The Annotation Process: 3 The Answer

Emotions are biological states associated with all of the nerve systems brought on by neurophysiological changes variously associated with thoughts, feelings, behavioural responses, and a degree of pleasure or displeasure. There is currently no scientific consensus on a definition. Emotions are often intertwined with mood, temperament, personality, disposition, creativity, and motivation.

Despite what is there currently no scientific consensus on a definition?

- By creating a question using the second sentence you automatically decided that the other sentence is the answer:
 - **ANSWER:** Emotions are biological states associated with all of the nerve systems brought on by neurophysiological changes variously associated with thoughts, feelings, behavioural responses, and a degree of pleasure or displeasure.

The Annotation Process: Final Output

Emotions are biological states associated with all of the nerve systems brought on by neurophysiological changes variously associated with thoughts, feelings, behavioural responses, and a degree of pleasure or displeasure. There is currently no scientific consensus on a definition. Emotions are often intertwined with mood, temperament, personality, disposition, creativity, and motivation.

QUESTION: Despite what is there currently no scientific consensus on a definition?

ANSWER: Emotions are biological states associated with all of the nerve systems brought on by neurophysiological changes variously associated with thoughts, feelings, behavioural responses, and a degree of pleasure or displeasure.

- This is the final annotation.

More Details on the Question Starts

More Details on the Question Starts

- In the next slides we will show you examples of how to choose the most suitable question starts.

Question Starts For TIME

- Sometimes there is a **temporal** relation between two sentences. In these cases you can use question starts asking about time:
 - After what
 - Before what
 - While what
 - Until when

He had lunch at the restaurant. Afterwards, he went for a long walk.

Good QAs:

Q: After what did he go for a long walk?

A: He had lunch at the restaurant.

Q: Before what did he have lunch at the restaurant?

A: Afterwards, he went for a long walk.

Question Starts For TIME

- Sometimes there is a **temporal** relation between two sentences. In these cases you can use question starts asking about time:
 - After what
 - Before what
 - While what
 - Until when

He had lunch at the restaurant. At the same time he also thought about the conversation he had..

Good QAs:

Q: While what did he have lunch at the restaurant?

A: At the same time he also thought about the conversation he had.

Q: While what did he think about the conversation he had?

A: He had lunch at the restaurant.

Question Starts For TIME

- Sometimes there is a **temporal** relation between two sentences. In these cases you can use question starts asking about time:
 - After what
 - Before what
 - While what
 - Until when

He had lunch at the restaurant. Until he realized that he should be at the office.

Good QAs:

Q: Until when did he have lunch at the restaurant?

A: Until he realized that he should be at the office.

Question Starts For CAUSE

- Sometimes there is a causal relation between two sentences. In these cases you can use question starts asking about the cause, the result or the purpose:
 - What is the reason
 - What is the result of
 - For what purpose

He was hungry. He decided to enter the nearest restaurant.

Good QAs:

Q: What is the reason he decided to enter the nearest restaurant?

A: He was hungry.

Q: What is the result of him being hungry?

A: He decided to enter the nearest restaurant.

Question Starts For CAUSE

- Sometimes there is a causal relation between two sentences. In these cases you can use question starts asking about the cause, the result or the purpose:
 - What is the reason
 - What is the result of
 - For what purpose

He entered the restaurant, in order to have dinner.

Good QAs:

Q: For what purpose did he enter the restaurant?

A: in order to have dinner

Question Starts For COMPARISON

- Sometimes two sentences are being compared. In these cases you can use question starts that either point out a similarity or difference:
 - What is similar to
 - What is contrasted with

This restaurant is very fancy, it serves fine-dining cuisine. The one next to it also serves fine-dining.

Good QAs:

Q: What is similar to the restaurant serving fine-dining cuisine?

A: The one next to it also serves fine-dining.

Q: What is similar to the one next to it also serving fine-dining?

A: This restaurant is very fancy, it serves fine-dining cuisine.

Question Starts For COMPARISON

- Sometimes two sentences are being compared. In these cases you can use question starts that either point out a similarity or difference:
 - What is similar to
 - What is contrasted with

This restaurant is very fancy, it serves fine-dining cuisine. The one next to it, on the other hand, serves fast-food.

Good QAs:

Q: What is contrasted with the restaurant serving fine-dining cuisine?

A: The one next to it, on the other hand, serves fast-food

Q: What is contrasted with the one next to it serving fast-food?

A: This restaurant is very fancy, it serves fine-dining cuisine.

Question Starts For Conditions

- Sometimes one sentence can explain a condition in which the other sentence happens. In these cases you can use the following question starts:
 - In what case
 - Unless what

We could have lunch. If you are hungry.

Good QAs:

Q: In what case could we have lunch?

A: If you are hungry.

We could have lunch. Unless you are busy.

Good QAs:

Q: Unless what could we have lunch?

A: Unless you are busy.

Question Start for Exception

- Sometimes one sentence illustrates an exception. In these cases you can use the following question start:
 - Except when

We usually have lunch at 12. Except yesterday we ate at 2PM.

Good QAs:

Q: Except when do we usually have lunch at 12?

A: Except yesterday we ate at 2PM.

Question Start for Alternative or Substitution

- Sometimes one sentence illustrates an alternative. In these cases you can use the following question start:
 - What is an alternative to
 - Instead of what

We could either have lunch. Or grab a bite to eat later in the afternoon.

Good QAs:

Q: What is an alternative to having lunch?

A: Or grab a bite to eat later in the afternoon.

He didn't have any lunch. Instead he spent the whole day working.

Good QAs:

Q: Instead of what did he spend the whole day working?

A: He didn't have any lunch.

Question Start for Manner

- Sometimes one sentence illustrates the manner in which the other sentence happens. In these cases you can use the following question start:
 - In what manner

He usually brings his own food to work. He prepares it the day before and brings it in a plastic container.

Good QAs:

Q: In what manner does he usually bring his own food to work?

A: He prepares it the day before and brings it in a plastic container.

NOTE: only use manner in cases where one sentence describes the manner in which the situation, that is described in the other sentence, happens.

Question Start for Manner

- Sometimes one sentence illustrates the manner in which the other sentence happens. In these cases you can use the following question start:
 - In what manner

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Good QAs:

Q: In what manner does he usually bring his own food to work?

A: He prepares it the day before and brings it in a plastic container.

NOTE: only use manner in cases where one sentence describes the manner in which the situation, that is described in the other sentence, happens.

Question Starts for Examples

- Sometimes one sentence provides an example for the other sentence. In these cases you can use the following question start:
 - What is an example of
 - What is a case of

He usually brings his own food to work. More specifically, he brings salads, soups or sandwiches.

Good QAs:

Q: What is an example of him bringing his own food to work?

A: More specifically, he brings salads, soup or sandwiches.

Question Starts for more Details

- Sometimes one sentence provides more detail for the other sentence. In these cases you can use the following question start:
 - What provides more detail on

New telephone lines posted healthy growth. Overall they increased 2.8% to 12.1 million..

Good QAs:

Q: What provides more detail on new telephone lines posting healthy growth?

A: Overall they increased 2.8% to 12.1 million.

Question Starts for Additional Information

- Sometimes both sentences give information about the same topic and none of the other question prefixes are applicable. In these cases you can use the following question start:
 - In addition to what
 - What expands upon

I can adjust the amount of insurance I want against the amount going into investment. I can pay more or less than the so-called target premium in a given year..

Good QAs:

Q: What expands upon being able to adjust the amount of insurance?

A: I can pay more or less than the so-called target premium in a given year.

When to use *Despite of what* and when to use *What is contrasted with*?

- These two question starts often get confused with each other!
- What is contrasted with: should be used when both sentences compare two or more differences between the thing they are describing.
- Despite of what: should be used when something that is expected is being cancelled, for example:

John and Mary look different. But they are sibilings.

Good QAs:

Q: Despite of what do John and Mary look different?

A: But they are sibilings.

Difference between Specification and Detail

- It is often hard to keep the following question starts apart:
 - What is an example of
 - What is a case of
 - **VS**
 - What provides more detail on
- The first two question starts should be used when one of the sentences provides an example or a specific instance of the other sentence.
- The third question start is meant for cases where one sentence describes a situation in more detail.

Difference between Purpose and Cause

- **For what purpose:** only use this question start when one sentence describes the purpose or goal that a human has!
- Use: **What is the reason / What is the result of** , for the other cases

*I want to be hungry at dinner tonight.
Therefore I will only eat a salad for lunch.*

Good QAs:

Q: For what purpose will I only eat a salad for lunch?

A: I want to be hungry at dinner tonight.

We had no serious damage on the railroad. Service is expected to resume by noon.

Good QAs:

Q: What is the reason Service is expected to resume by noon?

A: We had no serious damage on the railroad.

Summary

Summary

- Thank you for reading our guidelines!
- Please keep the guidelines in mind when completing the task and refer back to them if needed.

Thank you for your collaboration!