

# (v. 2) Module 6 - Compare two different topic models

## Survey Flow

Standard: Info about team & exercise (14 Questions)  
Standard: WHAT THIS MODULE DOES (1 Question)  
Standard: COMPARE MODELS (2 Questions)  
Standard: KEY FEATURES ACROSS MODELS (4 Questions)

ReferenceSurvey: Ref. Survey Research Takeaways  
ReferenceSurvey: (Ref. Survey) Survey end

Page Break

---

---

## Start of Block: Info about team & exercise

IS THIS A TRIAL? Before you begin, please check the choice below if this is just a trial or experimental exercise that should be ignored in collecting outputs from this module.

Trial surveys do not have to be completed. (However, you have to rush through them with empty answers all the way to the finish to clear them from the system. Otherwise, next time you open the same survey, Qualtrics will put you back where you were in the same survey.)

Actual surveys should be completed within one week, after which they will be automatically recorded as finished.

Check this field if this is just a trial: (1)

---

## OPEN RESEARCH POLICY

### **Statement of open research policy**

The modules of the WE1S Interpretation Protocol create records of research that support the project's aim of advancing "open, generalizable, and replicable digital humanities methodology" (see project ["About"](#) statement). This aim is related to current practices of ["open science"](#) and ["open-notebook science."](#) The basic idea is that the materials, methods, steps, and findings of research should be transparent so that other researchers know how conclusions were reached and can test or reproduce the process--an ideal that is especially needed for understanding such machine-learning methods as topic modeling (see [WE1S bibliography on machine-learning interpretability](#)).

In completing this and other modules of the WE1S Interpretation Protocol you are creating an "open notebook" that in principle can be shared with others as a public record of research. *Please be sure that all descriptions, observations, and notes you write in this module are consistent with being part of public record--that is, appropriate in tone, respectful to others, and not in violation of privacy or copyright restrictions.*

*However please also do not let the ideal of open-notebook science inhibit you from speculative or tentative in-progress commentary.* It is understood that research, open or otherwise, is a *process* of finding knowledge with many stages and levels of confidence. (At the conclusion of this and other modules of the Interpretation Protocol, you will be asked to rate your confidence level in the current exercise.)

*In addition, lab notebooks are allowed to be messy as a part of the research process.* It is not expected that notes written into these modules be copyedited as if for formal publication. (The

time for polishing is later when writing up a report synthesizing results from one or more modules of this Interpretation Protocol.)

---

**EXERCISE INFO Please enter the following the following information, which will generate an "Exercise ID".**

Team names and members can be looked up on the [Team Dashboard](#). (Note: at the end of this survey, you can also enter an email address if you wish to receive a copy of the survey with your answers.)

Your name or team name. (If team, then use the format "Team1", "Team2", etc.): (1)

\_\_\_\_\_

Interpretation project number (e.g., "4," indicating that this is the fourth interpretation project for you or your team that the exercise with this module is part of): (2)

\_\_\_\_\_

Which stage of your present interpretation project does this module represent? (E.g., if this module is the second you have used in the sequence of modules for the same interpretation project, then write the number "2" here. If multiple team members are working in parallel using various modules, then follow the convention of adding name-abbreviation letters for each member's stage--e.g., "2AL" (for Alan Liu), "2LT" (for Lindsay Thomas), etc. . (3)

\_\_\_\_\_

Today's date in the format YYYY-MM-DD (e.g., 2019-07-06) (4)

\_\_\_\_\_

The **present** Interpretation Protocol module you are using (e.g., 1, 2, 3a, 4a, etc.) --This is needed to generate an exercise ID. For example, if this is Module 3a, then enter 3a (5)

\_\_\_\_\_

---

**G DRIVE INFO Your team folder in the project Google team working space.**

The shared WE1S working space for AM teams in summer 2019 for storing notes, reports, materials, etc. related to interpretation work is in this [Google Drive folder](#). Go there to find the subfolder your team created for your work and enter its URL here.

**Please enter below the URL for your team's subfolder in the common AM Teams workspace:**

\_\_\_\_\_

---

Page Break

---



**EXERCISE ID Exercise ID**

The ID for the present exercise (generated from the information you just provided) is as follows. (Do not change. If you see a mistake, please go "back" in this survey and correct the information that generated the Exercise ID.)

---

**EXERCISE DESCRIP Exercise Description**

To assist in remembering what the exercise using this module is about, please enter below a very brief description of what you are currently doing (e.g., "We are now going to compare the keywords 'humanities' and 'sciences' in the 20190621\_2132\_us-humanities-top-newspapers---topics200 model.")

---

---

---

---

---

## TOPIC MODELS? **Topic models you are comparing**

This module assumes that you have previously examined individually the two topic models you are comparing using the modules of the Interpretation Protocol.

For your two models, which are here referred to as Model A and Model B, please enter below their "**topic model names**" and "**start page URLs**". A "**topic model name**" looks like this: "20190621\_2132\_us-humanities-top-newspapers---topics200". You can locate this name in the [Registry of WE1S Topic Models](#). Note that this is the name of the specific granularity of the model you are studying (number of topics)

The "**start page**" is the URL of the overall topic model (including all its granularities and their visualizations) listed on this page on the Harbor 10002 server: [Index of / projects/](#). (You can also find this URL in the Registry of WE1S Topic Models.) A start page URL looks like this: [http://harbor.english.ucsb.edu:10002/projects/20190621\\_2132\\_us-humanities-top-newspapers/](http://harbor.english.ucsb.edu:10002/projects/20190621_2132_us-humanities-top-newspapers/)

---

### MODEL A **Model A**

"Topic model name" for Model A (1)

---

"Start page" URL for Model A (2)

---

---

### MODEL B **Model B**

"Topic model name" for Model B (1)

---

"Start page" URL for Model B (2)

---

---

Page Break

**RESEARCH QUESTION Research question you are addressing**

Please enter below information about the research question you are addressing in this exercise. You can find this information in the "Registry of WE1S Research Questions." (If you are taking an overview of a model prior to working on a specific research question, just enter "Taking an overview")

Research question (1) \_\_\_\_\_

Operationalized form of question (2)  
\_\_\_\_\_

Research question ID (4) \_\_\_\_\_

---

**PREVIOUS MODULES Previous Interpretation Protocol modules you used to address your research question**

Enter in sequence below any Interpretation Protocol modules you have already completed in previous steps of your current interpretation project for each of the models you are comparing. For example, if you examined Model A in steps 1-3 of your interpretation project using modules 1, 2, and 3c, and then examined Model B in steps 4-8 using modules 1, 2, and 4a, then enter those module numbers in sequence for each of you models below.

MODEL A MODULES **Previous modules used for Model A** ([\\${MODEL A/ChoiceTextEntryValue/1}](#))

Enter in sequence below the Interpretation Protocol modules you have completed for Model A.

- Step 1 - Module used (1) \_\_\_\_\_
- Step 2 - Module used (2) \_\_\_\_\_
- Step 3 - Module used (3) \_\_\_\_\_
- Step 4 - Module used (4) \_\_\_\_\_
- Step 5 - Module used (5) \_\_\_\_\_
- Step 6 - Module used (6) \_\_\_\_\_
- Step 7 - Module used (7) \_\_\_\_\_
- Step 8 - Module used (8) \_\_\_\_\_
- Step 9 - Module used (9) \_\_\_\_\_
- Step 10 - Module used (10) \_\_\_\_\_





MODEL B MODULES **Previous modules used for Model B** ([\\${MODEL B/ChoiceTextEntryValue/1}](#))

Enter in sequence below the Interpretation Protocol modules you have completed for Model A.

- Step 1 - Module used (1) \_\_\_\_\_
- Step 2 - Module used (2) \_\_\_\_\_
- Step 3 - Module used (3) \_\_\_\_\_
- Step 4 - Module used (4) \_\_\_\_\_
- Step 5 - Module used (5) \_\_\_\_\_
- Step 6 - Module used (6) \_\_\_\_\_
- Step 7 - Module used (7) \_\_\_\_\_
- Step 8 - Module used (8) \_\_\_\_\_
- Step 9 - Module used (9) \_\_\_\_\_
- Step 10 - Module used (10) \_\_\_\_\_

---

Page Break \_\_\_\_\_

R1 exercise info

Reminders - Info about this Exercise: **Your name or team name:** [\\${EXERCISE INFO/ChoiceTextEntryValue/1}](#) [\\${G DRIVE INFO/ChoiceTextEntryValue}](#)  
**target="\_blank">Link to your team's folder on the WE1S project Google team drive.**

**Exercise ID:** [\\${EXERCISE ID/ChoiceTextEntryValue}](#) **Exercise**  
**Description:** [\\${EXERCISE DESCRIPT/ChoiceTextEntryValue}](#) **Topic models you are comparing:** **Model A:** [\\${MODEL A/ChoiceTextEntryValue/1}](#)

[\\${MODEL A/ChoiceTextEntryValue/2}](#) **target="\_blank">Start page of model** **Model B:** [\\${MODEL B/ChoiceTextEntryValue/1}](#)

[\\${MODEL B/ChoiceTextEntryValue/2}](#) **target="\_blank">Start page of model** **Research question**

**(and ID):** [\\${RESEARCH QUESTION/ChoiceTextEntryValue/1}](#) (research question ID [#\\${RESEARCH QUESTION/ChoiceTextEntryValue/4}](#)) **Operationalized form of question:** [\\${RESEARCH QUESTION/ChoiceTextEntryValue/2}](#) **Previous sequence of interpretation modules used for this question (for Model A):** [\\${MODEL A](#)

[MODULES/ChoiceTextEntryValue/1}](#), [\\${MODEL A MODULES/ChoiceTextEntryValue/2}](#), [\\${MODEL A MODULES/ChoiceTextEntryValue/3}](#), [\\${MODEL A MODULES/ChoiceTextEntryValue/4}](#), [\\${MODEL A MODULES/ChoiceTextEntryValue/5}](#), [\\${MODEL A MODULES/ChoiceTextEntryValue/6}](#), [\\${MODEL A MODULES/ChoiceTextEntryValue/7}](#), [\\${MODEL A MODULES/ChoiceTextEntryValue/8}](#), [\\${MODEL A MODULES/ChoiceTextEntryValue/9}](#), [\\${MODEL A](#)

[MODULES/ChoiceTextEntryValue/10}](#) **Previous sequence of interpretation modules**

**used for this question (for Model A):** [\\${MODEL B MODULES/ChoiceTextEntryValue/1}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/2}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/3}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/4}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/5}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/6}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/7}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/8}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/9}](#), [\\${MODEL B MODULES/ChoiceTextEntryValue/10}](#)

End of Block: Info about team & exercise

---

Start of Block: WHAT THIS MODULE DOES

MODULE PURPOSE

**What module 6 does**

(Module 6, v. 2, created 6 July 2019; last rev. 12 July 2019.)

This module of the WE1S topic model Interpretation Protocol assumes that you have previously examined two other topic models (referred to here as Models A and B) using sequences of Interpretation Protocol modules. Now you are comparing your observations on those models in relation to your research question.

**Cautionary note:** Normally, you will be comparing two topic models (models of different

collections of materials) because you want to compare one kind of documents to another--e.g., top U.S. newspapers to student newspapers. For statistical validity, such comparison should ideally be made on the basis of a *single* topic model in which all materials are modeled together. However, for a variety of real-world reasons, it is often the case that topic models are made for specific sub-collections of material (e.g., just top U.S. newspapers, or just student newspapers). Keep in mind, therefore, that while you can compare across topic models to gain a better understanding of a research problem and to provide supplementary evidence for a hypothesis, you cannot *rely* on such cross-model comparison as your sole or main evidence.

**Additional note:** Note that the WE1S Interpretation Protocol also includes two other modules that allow for different ways to compare sets of materials. *Module 4a (Compare multiple topics)* allows you to designate different "sets" of topics that you stock with topics representative of a particular kind of material. And *Module 5 (Compare two parts of a corpus)* [not yet available] allows you to use tools like Metadata-pyLDAvis and Metadata7D to compare sources in the WE1S corpus that have been categorized in the metadata with labels for the source kind, geographical region, and some other categories.

End of Block: WHAT THIS MODULE DOES

---

Start of Block: COMPARE MODELS

R1 exercise info [\\${R1 exercise info/QuestionText}](#)



**STEP 1 Step 1. Compare models.**

What are the important comparisons you notice between your models A and B as they bear on your research question? Please use the running note below to enter key observations on how exploring both models together helps advance your research question.

---

---

---

---

---

End of Block: COMPARE MODELS

---

Start of Block: KEY FEATURES ACROSS MODELS

R1 exercise info [R1 exercise info/QuestionText](#)



**STEP 2 Step 2. Key features across models.**

What are the key features of Model A and B--either similar or contrasting--that you can line up across models in support of your comparative observations above? By default (but you can vary this), use a format like the following to itemize such features:      Topics in Model A [list topics by number] versus Topics in Model B: [list topics by number]      Keywords in Model A [list keywords] versus Keywords in Model B: [list keywords]      Clusters in Model A [describe clusters]] versus Clusters in Model B: [describe clusters]

---

---

---

---

---

---

Page Break



### STEP 3 Step 3. Note any challenges in comparing across your two models

#### Reminder of earlier cautionary note:

Normally, you will be comparing two topic models (models of different collections of materials) because you want to compare one kind of documents to another--e.g., top U.S. newspapers to student newspapers. For statistical validity, such comparison should ideally be made on the basis of a *single* topic model in which all materials are modeled together. However, for a variety of real-world reasons, it is often the case that topic models are made for specific sub-collections of material (e.g., just top U.S. newspapers, or just student newspapers). Keep in mind, therefore, that while you can compare across topic models to gain a better understanding of a research problem and to provide supplementary evidence for a hypothesis, you cannot *rely* on such cross-model comparison as your sole or main evidence.

In light of the above caution, please add to your running note any particular problems in comparing across your two models that you might want to call attention to in later reporting on results of working on your research question? For instance, do you think that disparities between the models in numbers of documents, different kinds of materials, or other factors significantly qualify your conclusions? Or did you find it difficult to see correspondences between topics or keywords across models?

---

---

---

---

---

---

**GO TO SURVEY EXIT This concludes the substantive part of this cross-model comparison exercise.**

**Please make any revisions you need to your running note before pressing "next," which will take you to the normal exit stages of these Interpretation Protocol modules (starting with a chance to record "Research Takeaways").**

End of Block: KEY FEATURES ACROSS MODELS

Start of Block: RESEARCH TAKEAWAYS (v. 2, created 23 June 2019; rev. 27 June 2019)



### TAKEAWAYS **Before you finish: Research Takeaways?**

After studying your topic model in this exercise, are there any research takeaways you want to record, store, describe, or log (depending on the nature of the takeaway) to provide key evidence, materials, and data that can be used in writing up a report on your research question or for future humanities advocacy? For example, a research takeaway can be: Evidence in the form of an important topic(s) or relation between topic(s) and words, documents that you want to describe so that you can find it again; A screenshot of something you found while analyzing your topic model with one of the Topic Model Observatory visualization interfaces;

Citations for or excerpts from key documents associated with a topic (e.g., three newspaper articles you want to use in a report); A text copy of words in a topic ranked by proportional weight; Etc. If you have found such research takeaways, record, store, or describe them as appropriate in your team folder on the WE1S Google team drive. **Reminder:**

The folder for your team ([\\${QID136416173/ChoiceTextEntryValue/1}](#)) in the WE1S Google team drive is [\\${QID136446671/ChoiceTextEntryValue}](#) target="\_blank">here. The main "AM Team Working Space" for all the teams in the WE1S Google team drive is [here](#). You may also want quickly to log or make a note about your takeaways in the field below in order to have a record of them associated with this survey. That way, when you read over your survey results, you can remember what you took away and where you stored or annotated it.

P.S. Some of the Topic Model Observatory interfaces may also allow you to use the [Hypothes.is](#) web annotation tool to highlight or annotated them in your browser for private or shared use.

---

---

---

---

---



### COMPANION Q's? **Companion questions?**

"Companion questions" may be defined as questions that help provide context for the research question you are currently addressing or that are follow-on questions you might want to pursue later. WE1S asks you periodically to consider if companion questions have occurred to you because it's a good way to prevent the kind of "tunnel vision" that research can sometimes

create.

This is best explained by way of example. Suppose that your research question concerns the degree and nature of discussion about the "humanities crisis." A tunnel-vision view of the problem would be to consider only discussion of the "humanities crisis." A contextually wider view would consider companion questions such as the following: what is the degree and nature of discussion about *other* kinds of crisis by comparison? For example, in what other contexts (political, economic, spiritual, etc.) does the word "crisis" tend to appear? Do mentions of "crisis" in all these contexts tend to spike up together, or be concentrated in certain kinds of media or sources? Etc.

Having advanced on your research question using the present module, have any "companion questions" occurred to you? **If so, please set them down here so that they can be remembered for possible future use:**

---

---

---

---

---

End of Block: RESEARCH TAKEAWAYS (v. 2, created 23 June 2019; rev. 27 June 2019)

---

Start of Block: SURVEY END (v.2, created 20 June 2019, rev. 28 June 2019)

### CONFIDENCE?

#### Final consideration -- Confidence assessment

It is possible after conducting an interpretation exercise to conclude that you have either high or low confidence in the results (with confidence descending all the way down to a null result).

Please rank your level of confidence in the results of this interpretation exercise on the following scale:

	Null Result (no confidence) (1)	(4)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Valid Result (full confidence) (13)
Confidence level: (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**SUGGESTIONS? Suggestions about this module?**

Do you have any suggestions about this module of the WE1S Interpretation Protocol (problems, improvements)?

---

---

---

---

---

---

**EMAIL A COPY? Before you conclude this module of the WE1S Interpretation Protocol, do you wish to have a report of your answers emailed to you?**

Choose "yes" if you have completed the module successfully as part of an interpretation project. The plain-text, HTML, and PDF copies of your survey should be kept as part of the documentation for answering a research question.

- Yes (4)
- No (5)

---

*Display This Question:*

*If Before you conclude this module of the WE1S Interpretation Protocol, do you wish to have a report... = Yes*



**EMAIL ADDRESS Please provide your email address to receive a copy of this survey.**

You will receive by email a text transcript of the questions and answers in this survey, plus links to HTML and PDF versions. You should keep these as documentation of your interpretation project. **Caution:** The online HTML and PDF versions linked in the email will expire after 31 days.)

Good practice is to copy the emailed transcript as text into a Google Doc in your team folder (in a subfolder called "Qualtrics survey transcripts") and also to download and store there the PDF



version. Name the transcripts in the following format (for example): "Module3a (2019-07-11) - history (Tarika)" (In this example, "history" has been added because it was the keyword that Module3a was used to explore; and "(Tarika)" was added to identify the specific person completing the survey if the whole research team did not do so.)

**Caution:** The online HTML and PDF versions linked in the email you receive will expire after 31 days.

**Your email:**

---

-----

**END This is the end of the current module of the WE1S Interpretation Protocol.**

**IMPORTANT: To submit your answers and have Qualtrics mark your survey as completed, please press "Save à Next"**

End of Block: SURVEY END (v.2, created 20 June 2019, rev. 28 June 2019)

---