# Evaluation of the Text Reuse at Scale Explorer

#### About the new component

Thank you for agreeing to evaluate <u>impresso Text Reuse at Scale alpha release</u> for the exploration of text reuse data in semantically enriched newspaper data. We very much anticipate your feedback in the hope that it will lead to the improvement of future versions.

This new component was inspired by the outcomes of a workshop with historians, designers, computational linguists and digital humanists which discussed opportunities inherent in the integration of text reuse and other semantic enrichments such as the automated detection of named entities (persons, locations), topics, article types, and language.

We have pepared accompanying information about text reuse and its application on our corpus as part of the impresso FAQs which you can find here: <u>https://impresso-project.netlify.app/faq</u>

The new application offers three types of filters:

1) Metadata assigned during digitisation (e.g. newspaper titles and publication dates),

2) Semantic enrichments generated by the *impresso* project, and finally, and

3) Filters based on Text reuse specific data includes lexical overlap, cluster size and the time span between publication dates of passages within a text reuse cluster.

Interactive visualisations allow the exploration and comparison of text reuse data across time and titles in conjunction with these filters.

#### About the evaluation

At some you will need to be logged in to complete a task. We therefore ask you to create an impresso account

to access the full corpus. To do this, first complete the <u>registration form</u> and **then email us** this (digitally)

signed NDA form to info@impresso-project.ch.

The evaluation includes 5 tasks which guided the development of the application as well as a final assessment of the application.

Note: Some important tasks concerning e.g. virality detection, text passage-based search and data export are not yet supported by the application and are therefore not part of this evaluation.

For each task, we ask you to:

- 1. Carefully read the abstract task description.
- 2. Comment on its definition and scope below (optional).
- 3. Study how tasks are supported by the application using the descriptions, accompanying screenshots and links to example queries we provide.
- 4. Assign an overall score from 1 (easy) to 5 (hard).
- 5. Comment on your experience of completing the task together with suggestions for improvements in the comment box below.

Finally, we will ask you to score the individual interface elements together with additional comments on your overall user experience.

#### \* Indicates required question

1. Email \*

2. Please enter your first and last name \*

#### Task 1: Obtain an overview of text reuse in a corpus, collection or query.

This task captures the need to gain orientation regarding the presence of text reuse data within a given set of documents and over time. Users need to determine whether or not a given corpus, corpus subset, query result or collection contains instances of text reuse.

Such occurrences of text reuse should be understood regarding their distribution over time and a first assessment of their characteristics should be made. This can be facilitated by overviews of the distribution of metadata and enrichments such as time, newspapers, countries, content types, languages and named entities but also text reuse-specific measures such as lexical overlap, time span between publication dates, cluster size and number of passages.

The ability to inspect outliers and to determine averages offers additional valuable insights about the distribution of text reuse data at different levels of granularity. This includes, for example, the inspection of largest/smallest clusters, clusters with the highest/lowest lexical overlap, the ability to filter for earliest/latest cluster in the corpus or the longest time span between publication dates and constellations of any of these measures.

#### 3. What are your thoughts on Task 1?

#### 4. How is Task 1a supported by the application?

This first task will also help you familiarise yourself with the different components of the interface. Begin by opening the <u>link to the first example query</u>. Take a moment to orientate yourself within the interface. Note the small "i-buttons" which offer additional information.

Get an overview of the presence of text reuse in this query and use the following questions for orientation:

- 1. Which filter settings are currently applied?
- 2. What does the Overview tab reveal about the distribution of text reuse across article types, languages, and countries?

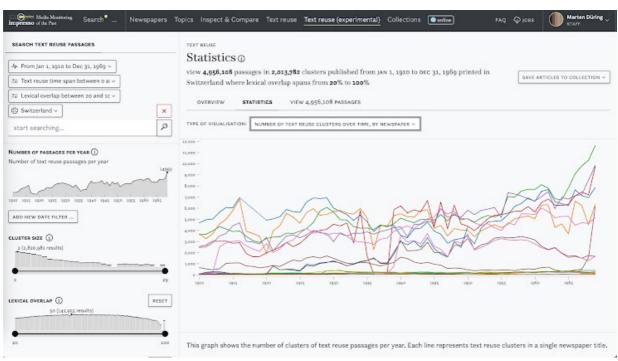
Made Moving Search <sup>®</sup> Newspapers To	opics Inspect & Compare	Text reuse Text re	use (experimental) Collectio	ms 💽 online	FAQ 😜 🌔	Marten Düring 🗸
SEARCH TEXT REUSE PASSAGES	TEXT REUSE Overview of T	ovt Pouco D	istribution			
Jr From Jan 1, 1910 to Dec 31, 1969 ~		in 2,013,782 cluster	s published from JAN 1, 1910 (	to DEC 31, 1969 prir	save Articl	ES TO COLLECTION ~
The Lexical overlap between 20 and 10 v	OVERVIEW STATISTIC					
P	NEWSPAPER		COUNTRY		TYPE	
	L'Express -E	803.787	Switzerland -E	4,955,108	article 🗄	4,613,977
NUMBER OF PASSAGES PER YEAR	Journal de Genève -E	759,112			advertisement -E	211,682
Number of text reuse passages per year	L'Impartial @	723,671			page article -E	106,345
	Gazette de Lausanne 🛞	707,319			buckets.type.section -E	24,104
1 mm	La Liberté 🐵	665,698				
1000 1005 1000 1005 1000 1005 1000 1005 1000 1005 1000	Le Peuple, La Sentinelle 🕀	590,182				
	Freiburger Nachrichten 🐵	184,744				
ADD NEW DATE FILTER	Die Tat 🗉	167,372				
CLUSTER SIZE	Confédéré 🛞	147,354				
z (2,820,981 results)	Neue Zürcher Zeitung 🛞	106,345				
+	LANGUAGE		PERSON		LOCATION	
	French 🐵	4,453,585	United States 🐵	109,797	France 🐵	1,372,786
2 29	German 🖅	\$02,371	Les Anglais 🖅	49.319	Paris 団	1,218,684
LEXICAL OVERLAP	English - 10	352	Les Alliés 🖅	49.107	Switzerland 🛞	964,504
50 (141,055 results)			David Lloyd George 🖅	37,036	Suisse, Moselle 街	824,137
			Léon Blum 🗐	36,928	Berlin 19	797,918
• •			Paris 🖅	34,781	Lausanne 🕣	755,099
20 100			Winston Churchill 🕀	29,366	Italy 🗐	726,925
			Radin Radin -F	350.84	Zürich -	65n +58

- This is hard
- This is somewhat hard
- This is neither hard nor easy
- This is somewhat easy
- This is easy

#### 5. How is Task 1b supported by the application?

Stay with the <u>link to the first example query</u>. Continue to get an overview of the presence of text reuse in this query:

- 1. Use the Statistics tab to explore the distribution of clusters and lexical overlap over time.
- 2. Use a different view in the Statistics tab to identify the size of the largest cluster in this query.
- 3. Move to the Passages tab. Sort the passages to find the cluster with the largest time span. How many days does it cover?
- 4. Change the country filter from Switzerland to Luxembourg. Which differences do you observe in cluster size over time?



#### Mark only one oval.

\_\_\_\_\_ This is hard

This is somewhat hard

- This is neither hard nor easy
- This is somewhat easy
- This is easy

#### 6. How is Task 1c supported by the application?

Stay with the <u>link to the first example query</u>. Continue to get an overview of the presence of text reuse in this query:

1. Click on a slot in one of the histograms, e.g. lexical overlap, cluster size, or time span. The Closeup view lets you select ranges of interest, for example to take a closer look at the clusters with the largest time span as pictured below. Previews of the passages appear below.

ZE Text reuse time span between 0 a v	Sw	itzerland	where lexical overlap spans from 20% to 100%	· · · · · · · · · · · · · · · · · · ·
22 Lexical overlap between 20 and 10 v		OVERVIEW	STATISTICS VIEW 4.956.108 PASSAGES	
Switzerland ~	×		TIME SPAN IN DAYS - CLOSE-UP VIEW X	
start searching	P	e of visua	91 0 91	
2	29	-	TEXTREUSECLUSTERDAYDELTA	/
	ESET LO.000	-	1799 to 2018	1
50 (141.955 results)	9,000 1. 1 8,000		mar Martha	
20	100 6,000		two tyle tyle tiles tile	AAA TOP DI
TIME SPAN IN DAYS	5,000 ESET 4,000	4	110,875 text reuse passages	
o (2,562,500 results)	3,000	A	Mitteilungen der Begierung, Bekanntmachung, tageblatt 🕘 MONDAY, MAY 12, 1919 – P.1	KAYA
•	1,000 100 0	4	Vom Januar 1920 -ab werden icn der staat lichen Entbindckngsunstillt im Psaffenthal	
FILTER BY TEXT REUSE CLUSTERS (2,013,782 OPTIONS)	•	1910	Kurse zur Heranbildung von Hebammen stattfinden. Es tann jckoch nur eine fehr	940 1945 2952 2955 2960 1965
PILTER BY NEWSPAPER TITLES (18 OPTIONS)	$( \mathbf{+} )$		beschränkte Zahl vosi.Schülerinnen aufg,enommen weiden, und es meOtzN daher	
FILTER BY TOPIC (200 OPTIONS)	(+) Thi	is graph	solche bevorzugt, die sich verpslich ten, sich an einem Orte niederzulassen, wo Man-(M@@an)	ar. Each line represents text reuse clusters in a single newspaper title.
	-		Cluster size: ag passages with 7.05% lexical overlap over 8011 days. Content length: 766 tokens.	
			COMPARE WITH OTHER PASSAGES IN CLUSTER	
			« < 1 2 3 4 » »	
			REMOVE FILTER FROM CURRENT SEARCH	

#### Mark only one oval.

This is hard

This is somewhat hard

- This is neither hard nor easy
- This is somewhat easy
- This is easy

7. What did you find easy / hard during the completion of Tasks 1a, b, and c? What \* should be improved?

#### Task 2: Obtain an overview of a single cluster.

This task is similar to Task 1 but focuses on the main properties of a single cluster. This includes the number of passages, their content, the lexical overlap between them, the time span between their publication dates as well as the distribution of semantic enrichments and metadata.

#### 8. What are your thoughts on Task 2?

#### 9. How is Task 2 supported by the application?

Open this example query (French) or this example query (German) which filters for a single cluster.

1. Use the filters on the left as well as the tabs in the centre to get a sense of the different types of content of the underlying articles.

2. Find out about the cluster's lexical overlap, the number of passages it contains and time span between publication dates.

3. Click the red [X] to remove all current filters from Search. Now select other clusters using the left filter pane. What can you learn about their characteristics (e.g. lexical overlap, time span, or size)? Also try the Overview and Statistics tabs. Is there anything else you would like to know about a cluster?

Media Mastantag Search <sup>®</sup> Newspapers T	opics Inspect & Compare Text reuse Text reuse (exp	perimental) Collections entities FAQ Collections State			
SEARCH TEXT REUSE PASSAGES	TEXT REUSE List of Text Reuse Passages				
27 Lexical overlap between 19 and 10 v	view 9 passages in 1 cluster containing hiroshima in clusters c466008 where lexical overlap spans from 19% to 100%				
™         ×            Ø	OVERVIEW STATISTICS VIEW 9 PASSAGES				
NUMBER OF PASSAGES PER YEAR					
Number of text reuse passages per year	6 aniit 1945: une bombe atomique frappe Hiroshima L'Impartial 🛞 Thursday, August 6, 2015 – P.27	Baolitzagijaffua atomiųus frappe Hiroshima Limpartial ⊕ WEDNESDAY, AUGUST 6, 2014 – P.23			
3867 3008 2009 3810 2011 2013 3813 3814 2015	6 août 1945 : une bombe atomique frappe Hiroshima L'ÉPHÉMÉRIDE Le monde entre le 6	6 août 1945 : le feu atomique frappe Hiroshima L'ÉPHÉMÉRIDE Le monde entre le 6 août 1945			
ADD NEW DATE FILTER	août 1945 soudai- nement dans une nouvelle ère, celle de la guerre nucléaire. Le bombardier B-29 américain « Enola Gay » largue une bombe	soudai- nement dans une nouvelle ère, celle de la guerre nucléaire. Le bombardier B-29 américain « Enola Gay » largue une bombe			
CLUSTER SIZE	atomique appelée « Little Boy » à l'uranium 235 sur la ville d'Hiroshima. La terrible explosion	atomique appelée « Little Boy » à l'uranium 235 sur la ville d'Hiroshima. La terrible expl <u>asion</u>			
a (3 vienus)	fait quelque 75 000 morts et près de g (MORF) Cluster size: 9 passages with 40.56% lexical overlap over 2922	fait quelque 75 000 morts et près de g (MDRE			
2 LEXICAL OVERLAP	days. Content length: 1,046 tokens.	days. Content length: 1,043 tokens.			
40 (9 results)					
40	6août1945.lefeu atomique frappe Hiroshima L'Impartial - Tursbay, August 6, 2013 – P.23	6 août 1945: le feu atomique frappe Hiroshima L'Express 🗄 Monday, August 6, 2012 – P.27			
DISMISS	6 août 1945 : le feu atomique frappe Hiroshima	6 a <u>í a + 3 &gt; ⊳ t</u> omique frappe Hiroshima			

- This is hard
- This is somewhat hard
- This is neither hard nor easy
- This is somewhat easy
- This is easy

## 10. What did you find easy / hard during the completion of Task 2? What should be \* improved?

#### Task 3: Compare differences between passages within a cluster.

This task concerns the comparison of two or more passages to reveal differences and similarities. A common motivation for such a comparison are editorial edits of texts under circulation, such as press agency outputs. Comparisons can e.g. reveal adaptations to suit the political preferences of a newspaper's audience, clarifications - what is obvious to one set of readers may need additional explanation to others, but also unintended differences such as degeneration, for example caused by OCR errors.

#### 11. What are your thoughts on Task 3?

#### 12. How is Task 3 supported by the application?

This <u>example query</u> (in French, use the language filter for German-language passages) will lead you to passages which contain the keyword "suffragettes". The screenshot below highlights variations between articles which cover the same event. Characters present only in the selected passage on the left are highlighted in red, characters only present in the compared passage are highlighted in green.

1. Select a cluster of your own interest and explore other instances of how passages differ.

Impresso of the Port	Newspapers Topics Inspect & Compare Text reuse	Text reuse (experimental) Collections entre	FAQ Q Marten Düring
SEARCH TEXT REUSE PASSAGES           suffragettes	COMPARE TEXT REUSE PASSAGES MONDAY, NOVEMEER 28, 1910 "M. Winston Churchill, mini 1799 to 2018 Apply current search filters (1) <b>996,366</b> results in Text Reuse	X stre du commerce, pronon* техтЯкизеРаззае	SAVE ARTICLES TO COLLECTION ~
2 LEXICAL OVERLAP SR (47 (results) SR (47 (results) SR (47 (results))	Compare the passage below lia crise britalilique. Gazette de Lausanne - Monovy, November 28, 1910 – P.2	with n. 20 of 3 passages m DATE (DESC) - Les suffragistes font de l'action directe 0 - 23 L'indépendance luxembourgeoise D TUESDAY, Novemen 29, 1910 - 22	
0 TIME SPAN IN DAYS 0 - 181 (1,338 results) 1 1	M. Winston Churchill, ministre du commerce, prononçait ven- dredi soir à Bradford a été coupé de plu- sieurs interruptions de suffragistes et de suffragettes qui ont été expulsés à tour de rôle. Comme l'orateur rentrait de Bradford à Londres, il fut attaqué dans le train par un individu, qui a essayé de le frapper avec une cravache en disant : « Voilà pour	M. Winston Churchill, revenant à Londres, après avoir prononcé un dis- cours à Bradford, où les suffragetes et leurs partisans avaient déjà violemment manifesté contre lui, a été attaqué dans le train par un individu, qui a essayé de le frapper avec une cravache en disant: «Vollà pour tol, chien!» Deux agents de police, qui accompagnaient M. Churchill, parèrent le coup, et	
PIETER EV NEWSPAPER TITLES (19 OPTIONS) ①       check one or more newspaper to filter results       L'Express (294 results) ①       Journal de Genève (294 results) ②       Gazette de Lausanne (230 results) ②       L'Impartial (182 results) ②	toi, chien !!» Deux agents de police parèrent le coup et s'emparèrent de l'homme après une lutte violente. A la gare de Londres, trois femmes ont également essayé de frapper M. Churchill ; elles en ont été empêchées par les agents. Undépendence (usembourgeoise ?!) Tutsow	s'em- parèrent de l'homme, après une lutte violente. On croit que l'assaillant est un des suffragistes expulsés de la réunion où M. Winston Churchill venait de parler. A la gare de Londres, trois femmes ont également essayé de frapper M. Chur-chill ; elles en ont été empêchées par les agents. Noveman Preibriertan II Turspay, Apail 29, 1975 – P.9	
La Liberté (133 results) - Le Peuple, La Sentinelle (112 results) - L'indépendance luxembourgeoise (62 result	29,1910 - P.2		

Mark only one oval.

This is hard
This is somewhat hard
This is neither hard nor easy
This is somewhat easy
This is easy

# 13. What did you find easy / hard during the completion of Task 3? What should be \* improved?

#### Task 4: Identify different types of text reuse.

Text reuse encompasses different forms of reiterated text, including e.g. co-publication, template-based content such as adverts or TV programmes, and press agency reports. But we can also distinguish text reuse based on temporal patterns, e.g. based on the duration (start - end date), virality, and rhythm of passage publication dates. Each of these phenomena maps to text reuse data characteristics, and semantic enrichments offer a highly versatile approach to segment text reuse data into meaningful categories.

We expect recurrent patterns for different types of text reuse. For instance, cinema adverts should be characterised by large number of named entities (persons), topics associated with media content, and a high lexical overlap, a large cluster size and a smaller time span.

#### 14. What are your thoughts on Task 4?

#### 15. How is Task 4 supported by the application?

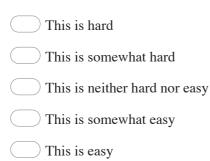
This <u>example query</u> filters for instances of slow text reuse with a time span of at least 60.000 days between the earliest and latest publication dates of passages.

1. Change the filter settings to e.g. 0-365 days and observe their distribution of clusters over time using the Statistics tab. Here, observe which newspaper title has the highest number of passages and how this evolves over time.

2. Continue to compile your own queries to identify different types of text reuse, for example based on article type, topic or keyword mentioned in a passage.

\*) Note that this filter will obscure instances of rapid text reuse with clusters which contain many passages published in quick succession (e.g. in the first 365 days) together with one or more passages published later. Future work includes adding a dynamic timeline to display passage publication dates on a day level.

impresso of the Part	opics Inspect & Compare Text reuse Text reuse (ex	perimental) Collections ( Prime) Fr	AQ & Marten Düring
SEARCH TEXT REUSE PASSAGES	TEXT REUSE		
fit Lexical overlap between 1g and 10 $\sim$	List of Text Reuse Passages view 105 passages in 29 clusters in clusters of size :	t to 42049 where lexical overlap spans from 19% to	
== Cluster size between z and 42,045 ~	100%		SAVE ARTICLES TO COLLECTION ~
== Text reuse time span between 60, ~	OVERVIEW STATISTICS VIEW 105 PASSAGES		
۹	TIME DIFFERENCE (LARGEST FIRST)		
Courrier du Valais (2 results) ① MORE(8 MORE OFTIONS) FILTER BY TOPIC (73 OFTIONS) filter results fr vie - monde - mort - foi - peuple (47 results) ① fr vie - monde - mort - foi - peuple (47 results) ① fr vie - monde - mort - foi - peuple (47 results) ① fr presse - journal - lettre - affaire - article (34 results) ① fr question - point - pays - conseil - gouvernement (30 results) ① fr main - Vele - temps - coup - air (27 results) ① fr part - lieu - familie - décès - avis (24 results) ①	Date (oldest first) Date (newest first) Cluster size (smallest first) Cluster size (largest first) Time difference (smallest first) <b>Time difference (largest first)</b> Lexical overlap (smallest first) Lexical overlap (largest first) Passage size, number of tokens (smallest first) Passage size, number of tokens (largest first)	QUAND NOTHE GIAND LAC GELAIT - L'Express II SATURDAY, FERRILARY 9, 1935 - P.6 hardiment à pied d'Estavayer à la foire de Neuchâtel. Hommes et femmes, petits et grands, pauvres et riches vont librement danser en rond sur une glace de deux bons pieds de roi. Commandant David Perret, député à la Constituante, né en 181 b, chef du mouvement répu blicain du Loole en 1848, fabricant d'hor- legerie, noyé en patinant devant Salnt (MORS) Clutter ster: 6 passages with 26.42% leisla overba over 66459 days. Coreet Inght: 6a tokens.	
fr tribunal - affaire - prison - procès - mois (24 results) - E fr conseil - commission - projet - loi - rapport (23 results) -E	COMPARE WITH OTHER PASSAGES IN CLUSTER	COMPARE WITH OTHER PASSAGES IN CLUSTER	
📄 fr temps - beau - degré - nord - pluie (21 results) 🗐			
MORE (63 MORE OPTIONS)	SUISSE Gazette de Lausanne 🗄 FRIDAY, FEBRUARY 12, 1830 – P.3	Le lac de Neuchâtel gelé en 1695 L'Impartial - FRIDAY, FEBRUARY 15, 1929 – P.3	
PILTER BY COLLECTION (3 OPTIONS) check one or more collection to filter results	Les annales d'Estavayer contiennent le passage	K ← 1 2 3 4 → 0, le lac était si	



## 16. What did you find easy / hard during the completion of Task 4? What should be \* improved?

Task 5: Generate research corpora based on text reuse clusters.

This task corresponds to the need for fine-grained content selection and the need to create meaningful subsets of text reuse clusters and associated passages based on all measures, enrichments and metadata.

#### 17. What are your thoughts on Task 5?

#### 18. How is Task 5 supported by the application?

To complete this task, <u>make sure that you are logged in with your impresso account</u>. Within *impresso*, corpus subsets are called "Collections" and can be treated as research corpora in their own right. They can be searched, exported or compared to each other.

Generate a query for a meaningful subset of text reuse passages (note the current limit of 10.000 articles per collection). Save the articles to a new collection (see screenshot, right side)
 Select the collection in the filter pane and filter for it. You can now focus your research on this subset of articles which contain text reuse passages and choose to export metadata and full text to csv (depending on copyright).

Note: A future release will allow comparative views using the Inspect & Compare explorer.

SEARCH TEXT REUSE PASSAGES	× List of Text Reuse Passages () view 20 passages in 18 clusters saved in tr-hiroshim:	a-lu; printed in Switzerland	SAVE ARTICLES TO COLLECTION
start searching	OVERVIEW STATISTICS VIEW 20 PASSAGES		search collections NEW
NUMBER OF PASSAGES PER YEAR ① Number of text reuse passages per year	DATE (NEWEST FIRST) ~		1 of 40 tr-hiroshima-lu
×	Uncle Sam will sparen — Der Kampf um den Die Tat 🔁 FRIDAY, JANUARY 9, 1948 – P.1	Ausland Freiburger Nachrichten - 21 FRIDAY, NOVEMBER 15	©marten.duering LAST MODIFIED FRI, APR 28, 2023 47 articles
allig span oper tido spir	ersuchte Tr. uman den Kongreß um Einführung des obligatorischen Militärdienstes als Fundament der nationalen Sicherheit. Die USA . könnten nur dann ein wirksames Element im Dienste des Weltfriedens darstellen , wenn sie machtvoll seien. Solange eine ernstliche Opposition gegen i die Ideale des Welt <u>friedens</u>	Anfangs September trug Beda Kälin-Nef Zimmermann -in Lachen (Schwyz), ein Zimmerofen durch eine steile Stiege him und kam dabei zu Fall . Er , erlitt einen Beinbruch und fchwere innere Verletzun, die nun zum Tode geführt haben , &	LAST MODIFIED FRI, APR 28, 2023 1,541 articles
EXICAL OVERLAP	4 bestehe , müßten die Vereinigten Staat dwekt	Cluster size: a passages with 85.25% lexical overlap o Content length: 251 tokens.	ver o days.
337 (2 results)	COMPARE WITH OTHER PASSAGES IN CLUSTER	COMPARE WITH OTHER PASSAGES IN CLUSTER	
30 TIME SPAN IN DAYS (])	85 NaN Neue Zürcher Zeitung Đ Sunday, August 4, 1946 – P.2	NaN Neue Zürcher Zeitung 🖅 SUNDAY, AUGUST 4, 19	46 - P.2
o (11 results)	den Vorschlägen der Außenmini- ster , die dm eh starke Argumente nahegelegt wer- den ,	Der weißrussische Delegierte Außenhane :// ( • ( • ) > soz .); Wirt- schaft (	

- This is hard
  This is somewhat hard
  This is neither hard nor easy
  - This is somewhat easy
  - This is easy

# 19. What did you find easy / hard during the completion of Task 5? What should be \* improved?

### Wrapping up

In this final section we ask you to reflect on your overall experience with the application.

### 20. Please rate how you feel about the following statements. \*

Mark only one oval per row.

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Fully agree
The application effectively supports the tasks presented in this evaluation.					
The usage examples and accompanying information give a clear understanding of the functionalities of the application.					
It is easy to navigate the application.					
Application loading times are acceptably fast/responsive				$\bigcirc$	

\*

21. The following element in the application facilitates effective exploration of text reuse data.

Mark only one oval per row.

			Neither		
	Strongly	Somewhat	disagree	Somewhat	Fully
	disagree	disagree	nor	agree	agree
			agree		
Search	$\bigcirc$				
Filter					
pane (left	$\bigcirc$		$\bigcirc$		$\bigcirc$
side)					
Overview		$\frown$		$\frown$	
tab	$\bigcirc$		$\bigcirc$	$\bigcirc$	$\bigcirc$
Statistics					
tab and	$\bigcirc$	$\bigcirc$	$\bigcirc$		$\bigcirc$
its views					
Passages					
tab	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Save					
articles to	$\bigcirc$		$\bigcirc$		
collection					
Close-up					
view	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

22. Is there anything in the application that doesn't make sense? Does anything feel out \* of place?

23. Future development of the application should focus on these tasks / features / overall \* improvements:

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