



Evaluation Session Trivalent

Introduction

The purpose of this session is to evaluate some of the results of the WP3 (Analysis of radical narratives online and offline). In particular, this evaluation session will evaluate the results of tasks T3.1 (Semantic Engine for automatic analysis of online and offline content) and T3.2 (Identification and analysis of radicalization narratives offline).

The scenario that has been developed is the following. In order to understand radicalism roots, it is important to be able to analyze (i) how radicalists express their messages and (ii) news about radicalism in general media, in order to be updated of the socioeconomic and political situation.

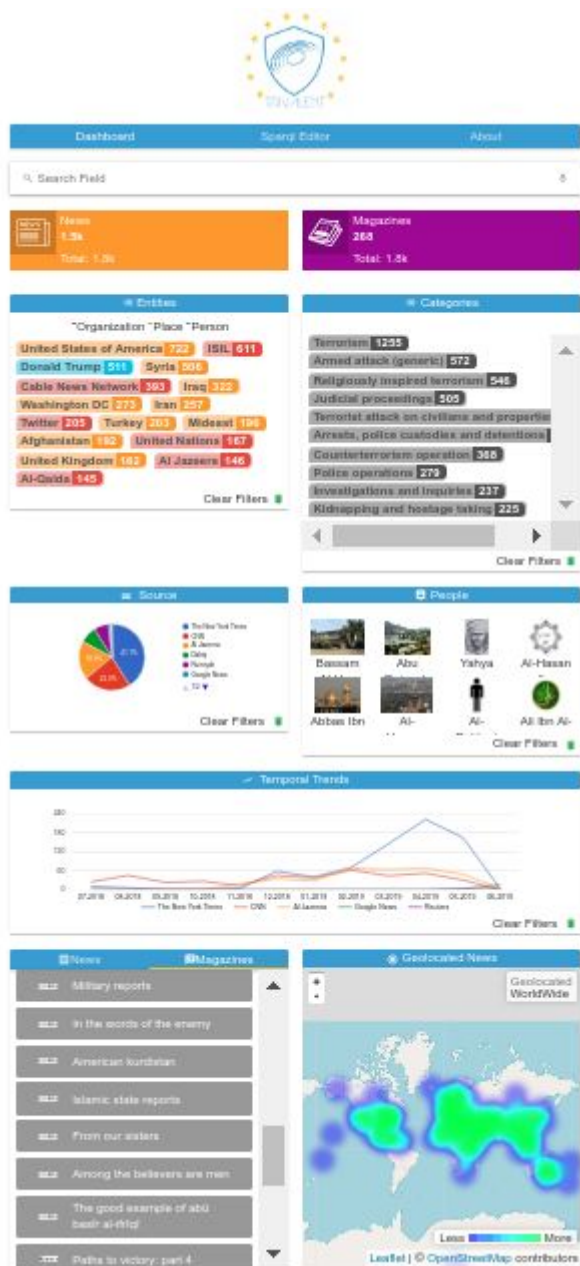
Based on this, the aforementioned tasks have carried out:

- scraping techniques to process radical material (i.e. Dabiq and Rumiya magazines) as well as general newspapers (i.e. Google News, CNN, New York times, Aljazeera ...)
- application of natural language processing and machine learning techniques to extract information of the news and classify them automatically according to a taxonomy
- provide a front end where users can search news and understand the analysis.
- create a corpus of radical texts that can be used for other purposes (such as identification of radical texts or analyzing the evolution of radical language).

In this evaluation session we are going to interact with these technologies through the front end, which is located at <http://dashboard-trivalent.gsi.upm.es/>.

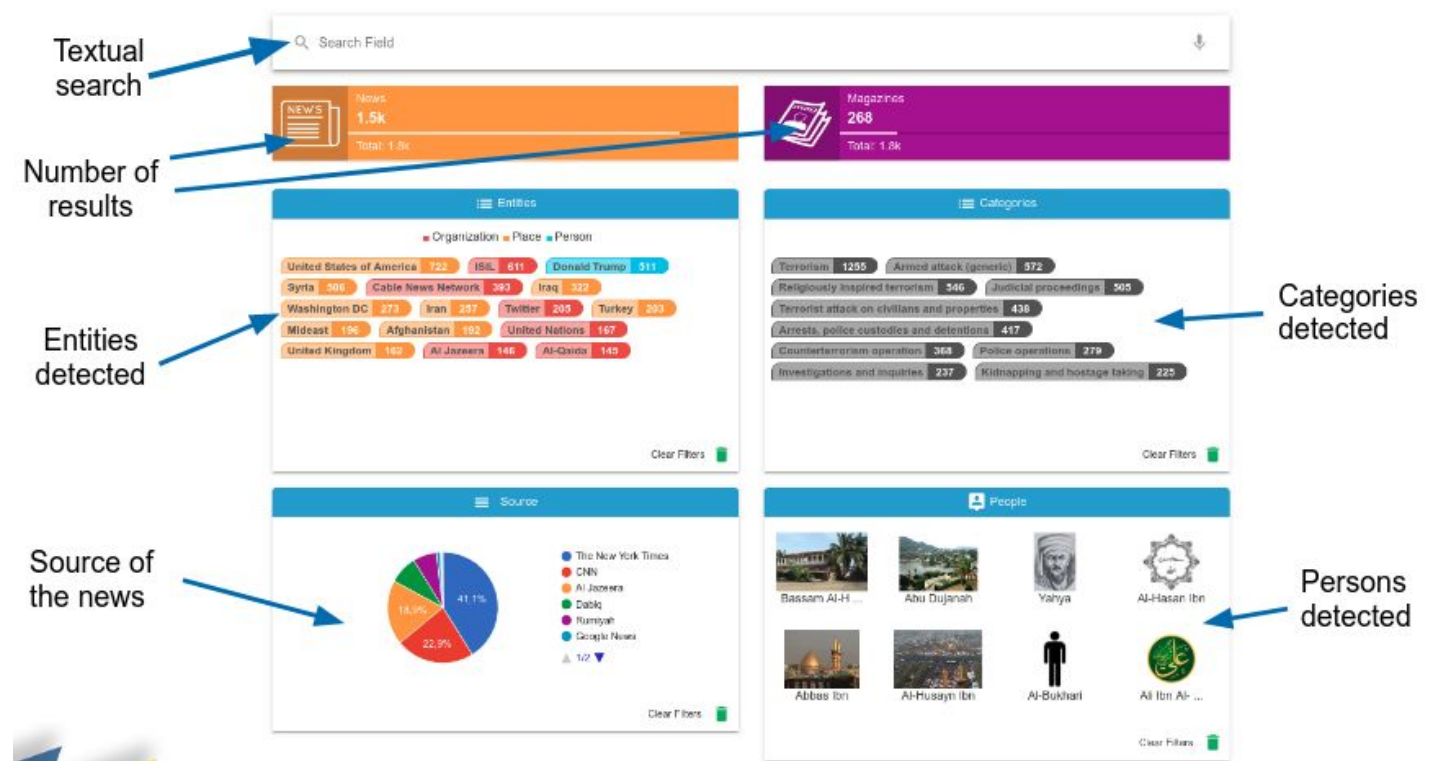
Interface overview

The front end consists of a dashboard as shown in the following figure. It is composed of several widgets which can be combined to filter the results.

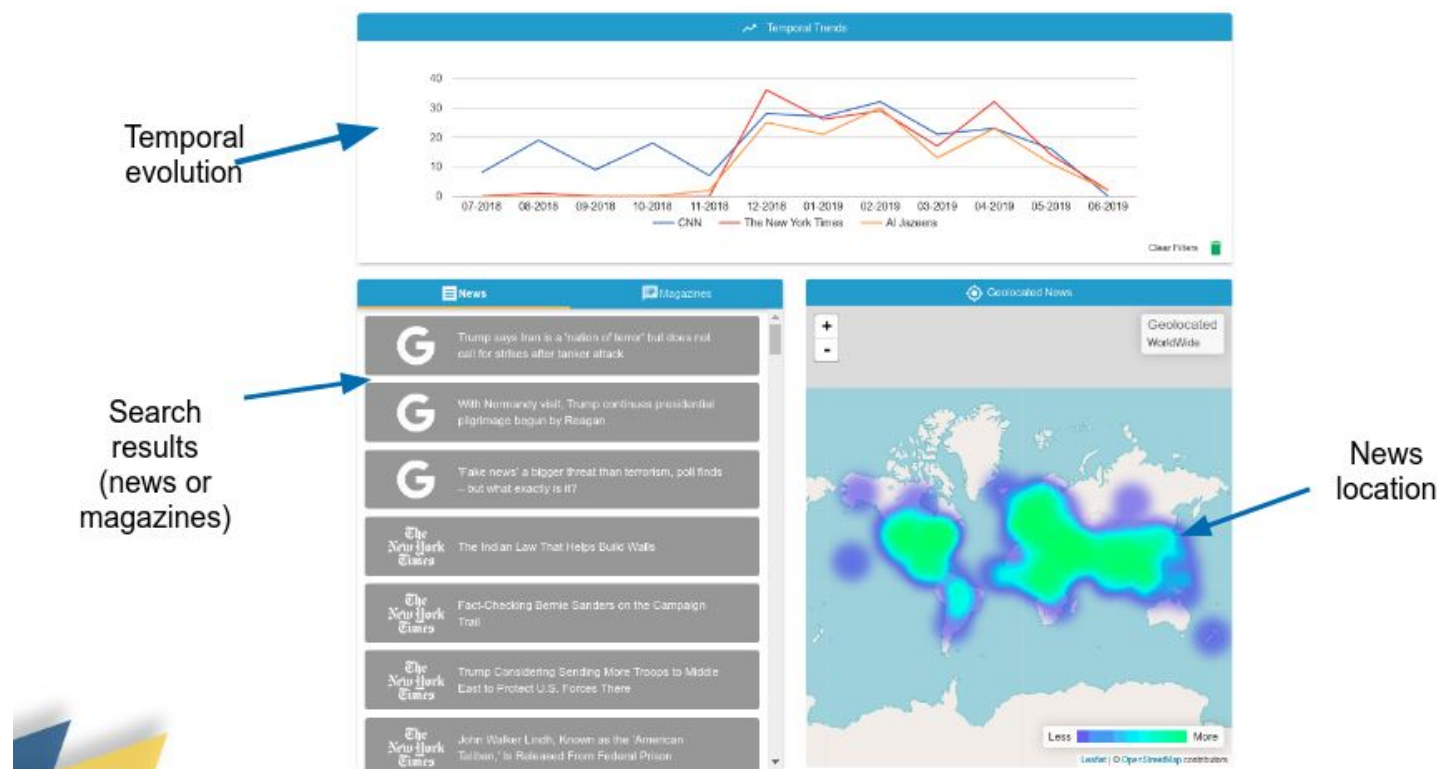


Let's analyze in detail the interface.

The upper part of the interface, as shown below, is composed of 7 widgets: textual search, number of results (news), number of results (magazines), entities, categories, source of the results and identified people.



The bottom part of the interface, as shown below, is composed of three widgets: the temporal evolution of news, the search results, and the news location.



Case study

Let's suppose we want to search information related to 'Abu Hassan'. We just need to write the name in the search widget and press Enter.

As shown below, all the widgets are updated. We can see that this term is mentioned in 103 pieces of news and 175 magazines. In addition we can see the main entities, sources, people, ... of these results.

LLet



The screenshot displays a search interface for the term 'Abu Hassan'. At the top, there is a navigation bar with 'Dashboard', 'Sparql Editor', and 'About'. Below the search bar, which contains 'Abu Hassan', there are two summary cards: 'News' with 103 items and 'Magazines' with 175 items, both totaling 278 items. The main content area is divided into four filterable sections: 'Entities', 'Categories', 'Source', and 'People'. The 'Entities' section shows a legend for Organization (red), Place (orange), and Person (blue), with various entities and their counts. The 'Categories' section shows various categories and their counts. The 'Source' section shows a pie chart of sources. The 'People' section shows a grid of person images and names.

| Entity | Count |
|--------------------------|-------|
| United States of America | 82 |
| ISIL | 81 |
| Iraq | 80 |
| Syria | 74 |
| party of Allah | 59 |
| Iran | 48 |
| Al-Bukhari | 46 |
| Donald Trump | 36 |
| Abu Bakr al-Baghdadi | 33 |
| Cable News Network | 33 |
| Yemen | 27 |
| Al-Qaida | 26 |
| Mideast | 26 |
| Baghdad | 24 |
| France | 24 |
| Turkey | 24 |

| Category | Count |
|-------------------------------------------------------|-------|
| Terrorism | 231 |
| Religiously inspired terrorism | 166 |
| Armed attack (generic) | 153 |
| Judicial proceedings | 82 |
| Terrorist attack on civilians and properties | 79 |
| Arrests, police custodies and detentions | 71 |
| Terrorist attack on military and police forces and... | 65 |
| Police operations | 55 |
| Kidnapping and hostage taking | 53 |
| Bombing | 49 |

| Source | Percentage |
|--------------------|------------|
| Dabiq | 34.9% |
| Rumiyah | 28.1% |
| Al Jazeera | |
| CNN | |
| The New York Times | |

| Person | Image |
|-----------------|---------|
| Waqar ul | [Image] |
| Hassan | [Image] |
| Mamduh Must ... | [Image] |
| AbdurRahman ... | [Image] |
| Abu Muqatil ... | [Image] |
| Abu Radi Al ... | [Image] |
| Husayn Farruh | [Image] |
| Yunus Sharif | [Image] |

Since there are many results, we can filter more. Let's press on Iraq, and we will see all the results that mention both 'Abu Hassan' and 'Iraq'. Since we are using semantic technology, the texts could even not have these names but variations of them.

After clicking on Iraq, we can see that now the number of results is lower. We could go on filtering in our search.

🔍 Abu Hassan
🎤

NEWS
News

41

Total: 80

Magazines

39

Total: 80

Entities

■ Organization
 ■ Place
 ■ Person

Iraq 80

Syria 47

United States of America 44

ISIL 43

Donald Trump 20

Cable News Network 19

Iran 19

Abu Bakr al-Baghdadi 17

Saudi Arabia 16

Yemen 15

Afghanistan 14

Mideast 13

Al-Qaida 12

Baghdad 12

United Kingdom 12

France 11

[Clear Filters](#)

Categories

Terrorism 74

Religiously inspired terrorism 63

Armed attack (generic) 44

Terrorist attack on civilians and properties 26

Terrorist attack on military and police forces and... 25

Arrests, police custodies and detentions 24

Kidnapping and hostage taking 20

Counterterrorism operation 19

Recruitment and training 18

Judicial proceedings 16

[Clear Filters](#)

Source

| | |
|----------------------|-------|
| ● Dabiq | 38.8% |
| ● CNN | 25% |
| ● Al Jazeera | 17.5% |
| ● Rumiyah | |
| ● The New York Times | |

[Clear Filters](#)

People

Al - Thaya

Abdul Satar ...

Salah Hassan

Schams Hann ...

Abu Bakr Al ...

Hisham Al-H ...

Barham Salih

Saddam Hussein

[Clear Filters](#)

Now we want to see a specific result. We scroll down and click of the first piece of news. We can see the main information extracted from the text. If we click on the extracted terms, the original text is highlighted. In addition, we can visit the newspaper when the article was published (clicking on visit site).

The screenshot displays a news analysis tool interface. At the top, a line chart titled "Temporal Trends" shows data points over time. Below the chart, a news article snippet is shown with a blue header: "Fourth French ISIL member sentenced to death in Iraq" dated "5/27/2019". To the left of the article is a list of extracted terms categorized by color: Places (orange), Organization (red), Person (blue), and Category (grey). The terms include "Foreign Office", "Amnesty International", "Reuters", "Human Rights Watch", "ISIL", "Mustafa Mohammed Ibrahim", "Nadim Houry", "Leonard Lopez", "Abu Bakr al-Baghdadi", "Jean-Yves Le Drian", "Iraq", "France", "Syria", "United States of America", "Terrorism", "Judicial proceedings", "Arrests, police custodies and detentions", "Penal proceedings", "Violence and sex offences", "Religiously inspired terrorism", "Counterterrorism operation", "Terrorist attack on public building", and "Cyber Terrorism". To the right of the terms is a text box containing the article's content, with some words highlighted in yellow. At the bottom right of the article snippet, there are "Visit Site" and "Close" buttons. The background shows a map with a heatmap overlay and a sidebar with logos for "The New York Times", "CNN", and "members".

Temporal Trends

4
3
2
1
0

Fourth French ISIL member sentenced to death in Iraq 5/27/2019

■ Places ■ Organization ■ Person ■ Category
 Foreign Office Amnesty International
 Reuters Human Rights Watch ISIL
 Mustafa Mohammed Ibrahim Nadim Houry
 Leonard Lopez Abu Bakr al-Baghdadi
 Jean-Yves Le Drian Iraq France
 Syria United States of America
 Terrorism Judicial proceedings
 Arrests, police custodies and detentions
 Penal proceedings
 Violence and sex offences
 Religiously inspired terrorism
 Counterterrorism operation
 Terrorist attack on public building
 Cyber Terrorism

death for joining the Islamic State of Iraq and the Levant (ISIL or ISIS), despite France reiterating its opposition to capital punishment. Iraqi court officials said the man, 37-year-old Mustafa Mohammed Ibrahim, had been sentenced on Monday to death by hanging, a day after three other Frenchmen were given death sentences for being ISIL members. They can appeal against their convictions. The French foreign ministry said in a statement following the judgment that it respected the sovereignty of the Iraqi authorities and that ISIL members "had to answer for their crimes", but stressed France's opposition to the death penalty. "The French embassy in Iraq, in its role as provider of consular protection, is taking the necessary steps to convey its position to the Iraq authorities," the statement added. The other three French citizens sentenced to death on Sunday were named Kevin Gonot, Leonard Lopez and Salim Machou. The four convicted men were handed to Iraqi authorities in February by the United States-backed Syrian Democratic Forces (SDF), part of a group of 280 Iraqi and foreign detainees that also included French citizens. Five more Frenchmen are expected to go on trial in early June to face charges of being members of ISIL, two court officials told the Reuters news agency. Criticism from rights groups Iraqi courts have placed on trial hundreds of foreigners, condemning many to life in prison and others to death, although no foreign ISIL members have yet been executed. 190526120501932 Rights groups have criticized Iraq's trials, which they say often rely on

Clear Filters

Geolocated WorldWide

Visit Site Close

Less More

Leaflet | © OpenStreetMap contributors

The same functionality is available in the panel Magazines for the journals Dabiq and Rumiya.

The screenshot displays the DABIQ magazine interface. At the top, the title "THE ALLIES OF AL-QĀ'IDAH IN SHĀM" and "Issue: 8" are visible. A filter panel on the left lists various categories and entities, including "Democratic Union Party", "Kurdish Autonomous Democratic Administration", "Syrian Revolutionary Command Council", "Hazm Movement", "Authenticity and Development Front", "Fastaqim Kama Umirt", "Central Intelligence Agency", "Al-Qaida", "Kurdish Workers Party", "party of Allah", "Free Syrian Army (FSA)", "National Coalition of Syrian Revolutionary and Opp", "Supreme Military Council (SMC)", and "Syrian Kurdish Democratic Union Party (PYD)". Below these are names like "Ibn Kathir", "Umar Al-Baghdadi", "Al-Bukhari", "Bilal", "Jami", "Iraq", "Aleppo", "Afrin", "Terrorism", and "Institutions working against terrorism". The main content area shows a magazine cover with the title "THE ALLIES OF AL-QĀ'IDAH IN SHĀM" and a photograph of two men. A "Close" button is located at the bottom right of the interface.

This short demonstration has provided an overview of the main functionalities of the interface. In the following we will start with the evaluation.

Evaluation

The goal of the following questionnaire is to obtain information on the experience and attitude from users. All information provided will be treated as strictly confidential and will not be used outside the purposes of this survey.

Thank you for your cooperation!

First we would need some information about you for statistical purposes.

| | |
|-------------------------------|---------------------------------|
| Gender | |
| <input type="checkbox"/> Male | <input type="checkbox"/> Female |

| | | |
|-------------------------------|--------------------------------|---------------------------------|
| Age | | |
| <input type="checkbox"/> 0-30 | <input type="checkbox"/> 31-50 | <input type="checkbox"/> 51-100 |

| | | | | | | | | |
|----------------------------------|----------------------------------|---------------------------------|--------------------------------|---------------------------------|---------------------------------|-----------------------------------|-----------------------------|--------------------------------|
| Nationality | | | | | | | | |
| <input type="checkbox"/> Albania | <input type="checkbox"/> Belgium | <input type="checkbox"/> Israel | <input type="checkbox"/> Italy | <input type="checkbox"/> Latvia | <input type="checkbox"/> Poland | <input type="checkbox"/> Portugal | <input type="checkbox"/> UK | <input type="checkbox"/> Spain |
| <input type="checkbox"/> Other | If other, please specify: | | | | | | | |

| | | |
|-------------------------------------|----------------------------------|------------------------------|
| Role | | |
| <input type="checkbox"/> Researcher | <input type="checkbox"/> Company | <input type="checkbox"/> LEA |

If LEA, please specify:

| | | |
|---------------------------------------|------------------------------------------|------------------------------------------|
| The scope of your work | | |
| <input type="checkbox"/> Local police | <input type="checkbox"/> National police | <input type="checkbox"/> Special Service |
| <input type="checkbox"/> Other | If other, please specify: | |

If LEA, please specify:

| | | | | | |
|------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------|--------------------------------------|----------------------------------------|-----------------------------------|
| Select the activities you are involved in relationship with radicalism (all that apply). | | | | | |
| <input type="checkbox"/> Prevention | <input type="checkbox"/> Detection | <input type="checkbox"/> Training | <input type="checkbox"/> Counselling | <input type="checkbox"/> Counterattack | <input type="checkbox"/> Analysis |
| <input type="checkbox"/> Other | If other, please specify: | | | | |

State the extent which you agree /disagree with the following statements

1. Strongly Disagree, 2. Disagree, 3. Moderately Disagree, 4. Moderately Agree, 5. Agree, 6. Strongly Agree

1. Previous expertise with computers and news analysis

| Score (1-6) | Statement |
|-------------|-----------------------------------------------------------------------------|
| | I am very familiar with and experienced in using computers |
| | I am very familiar with and experienced in using the Internet |
| | I am very familiar with and experienced in using search engines |
| | I am very familiar with and experienced in using systems for analyzing news |

2. Functionality

| Score (1-6) | Statement |
|-------------|---------------------------------------------------------------------------------------------|
| | A dashboard can be interesting for getting insights of the evolution of radicalism |
| | The tool could save me time in my work |
| | I would be interested in having a similar tool including local information |
| | This tool could be useful in my unit to organize automatically information we are managing |
| | This tool could be useful in my unit to distribute automatically the information internally |

4. Interface

| Score (1-6) | Statement |
|-------------|-----------------------------------------------------------------------------------------------------------------|
| | The widget 'Textual Search' is useful for analyzing and filtering information |
| | The widget entities (i.e. Persons, Places, Organizations) is useful for for analyzing and filtering information |
| | The widget categories is useful for for analyzing and filtering information |
| | The widget source is useful for for analyzing and filtering information |
| | The widget people is useful for for analyzing and filtering information |
| | The widget temporal trends is useful for for analyzing and filtering information |
| | The widget geolocated news is useful for for analyzing and filtering information |

Are you missing any widget? Please, detail.

5. News Analysis

In this section we want to evaluate the categories of the news. Check different news (go to News Results and click on any specific result) and analyze the categories.

| Score (1-6) | Statement |
|-------------|----------------------------------------------------------------|
| | The defined categories are useful for analyzing radicalism. |
| | The number of categories is suitable for analyzing radicalism. |

Are you missing any category? Please, detail.

6. Final comments

What do you like most of this tool / technology? Please, detail.

What would you like to improve in this tool / technology? Please, detail.