#### **BBC NEWS**LABS

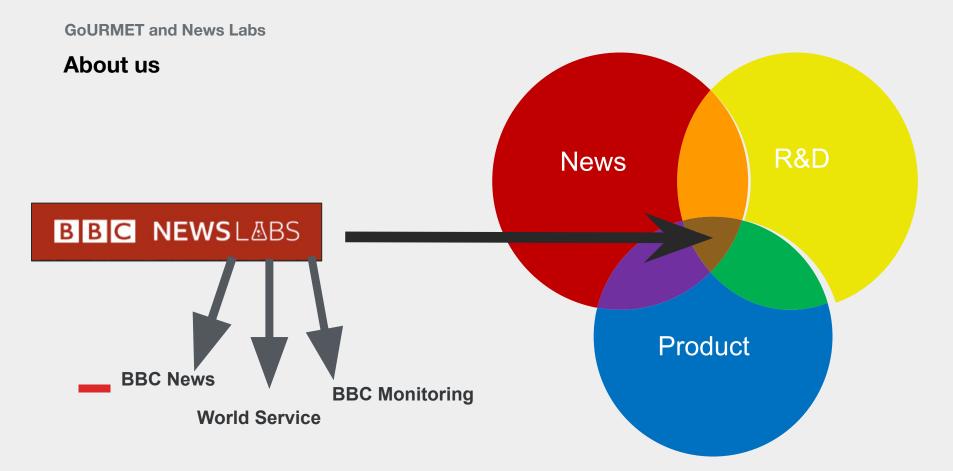
# GoURMET and Multilingual Journalism at News Labs

Sevi Sariisik, Lei He, Anna Blaziak 18 November 2021 - Gourmet User Day

## What is multilingual journalism?

How can we work better in a truly multilingual environment?

# Where would multilingualism generate most value for audiences?



3 BBC NEWSLABS

**GoURMET** and News Labs

#### **NL Multilingual Journalism Team**



Lei He

Anna Blaziak

Sevi Sariisik

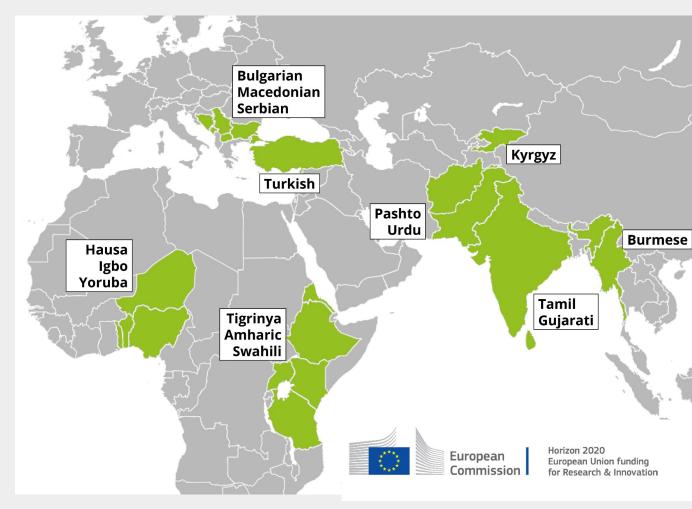
**GoURMET** and News Labs

Scope

2018-2022

Academia-Media Partnership

16 languages from BBC & DW portfolio



#### Languages in scope:

Amharic Bulgarian Burmese Gujarati

Hausa Igbo Kyrgyz Macedonian Pashto Serbian Swahili Tamil Tigrinya Turkish Urdu Yoruba



**GoURMET** and News Labs

#### **Benefits**

Close cooperation between

Researchers Innovation teams Editorial teams

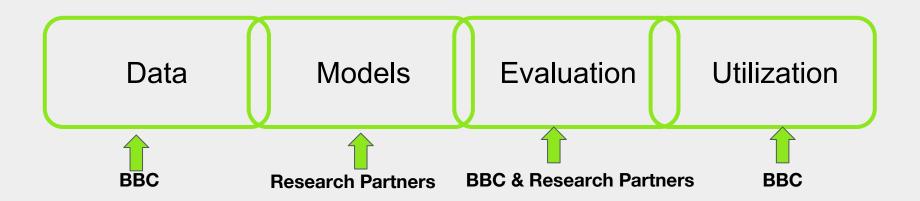
Cross-discipline exposure & insight

Custom MT models



**GoURMET** and News Labs

#### Workflow



### **Objectives/Key areas**

Monitoring Live Pages Tr. Content creation Frank Domain specific (Health) Multilingual GST

# **Live Pages Translation**

10 BBC NEWSLABS

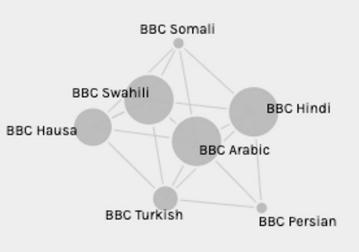
## What are Live Pages?

- For popular, fast moving, multi-aspect events/themes, e.g. Coronavirus, Climate Change Conference, Black Lives Matter, etc.
- Written in small snippets, less formal style, fast moving
- Can showcase localized content, that core outlets did not cover



### **Opportunities**

- BBC produces content in **43** languages and most World Service teams run Live Pages
- Teams are interested in content from other teams and they're using **machine translation** already
- Duplication in Live Page creation for World Service
   journalists
- Good original content gets trapped in the original
  language, if other journalists don't know it exists.



## Live Pages Translation

**Hypothesis:** Machine translation is good enough so that journalists want to use it to monitor, create or update live pages on a daily basis.

**What:** A monitoring tool that allows BBC World Service journalists to easily monitor Live Pages from all World Service teams and to reuse stories.

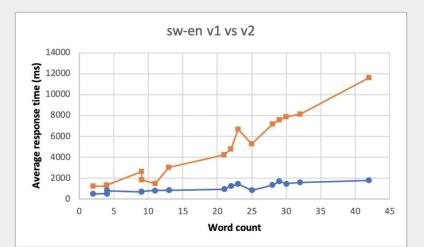
**How:** A rapid prototype that uses Google Translate with the option to integrate GoURMET models

### Trial during U.S. Election and key insights

- General translation quality:
  - Machine translations regarded as high enough quality for the task required: scanning for content to further research and re-use. Occasional errors reported.
  - Machine translation is not good for non-English language pairs, e.g. from Arabic to Urdu
- **Stories re-used:** Some stories taken and repurposed from other live pages. Arabic, English, Hausa and Azeri all mentioned.
- **Frequent use:** Some users self-report using prototype several times a week.
- Non-live page content: Several users interested in seeing other BBC content translated in the feed such as CPS articles. Several would like copyright, video and social media embeds pulled through to feed.
- 14 BBC NEWSLABS

### **GoURMET** model integration

- Processing time for a typical Live Page post (of 150 words) is 6 7 seconds.
- We have about 100 posts across all languages per day.
- To ensure acceptable page load time, we would need to pre-translate rather than use on-demand batch translation.
- Collaborated with Juan Antonio from the University of Alicante to reduce the processing time of Swahili models



B B C NEWS | HAUSA

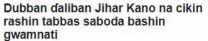
Labaran Duniya Wasanni Nishadi Cikakkun Rahotanni Bidiyo Shirye-shirye na Musamman Shirye-shiryen rediyo



#### Core digital offer: Text Articles (150-800 w)

#### App. 400 articles p/d





Wannan yanayi da ɗaliban suka tsinci kansu na da alaƙa da gazawar gwamnatin jihar na biyan kuɗaɗen da hukumar shirya jarrabawar kammala sakandare ta Najeriya wato NECO ke bin gwamnatin Salo'i 3 da suka wuce

Daliban da ke cikin kunci saboda rashin zuwa makaranta a Kano

Naira miliyan 300 na marayu sun yi ɓatan dabo a Kotun Musulunci a Kano



Real Madrid za ta jinkirta sayen Mbappe, Man Utd za ta rabu da Henderson Amnesty Sa'o'i 3 da suka wuce Sa'o'i 3 da suka wuce

Masu fyade na cin karensu babu babbaka a Najeriya -Sa'o'i 3 da suka wuce

Birnin da Musulmai suke jagoranci a Amurka

Na tabbata ɗan uwana ya samu kyakkyawar makoma - Kanen Janar Zirkushu

Sa'o'i 3 da suka wuce



Sojojin Najeriya 'sun harbe masu zanga-zangar End Sars'

### What kind of MT content would offer best value?

#### 16 **BBC NEWS**LABS

Boko Haram na rike da ikon wasu yankunan jihar Neja' 16 Nuwamba 2021

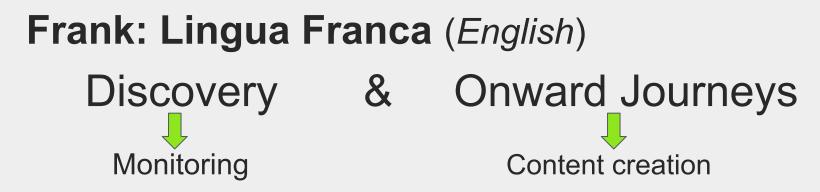
Yan bindigar da ke kai hari Sokoto za su dan-dana kudarsu- Buhari

Sheikh Gumi

Dalilin da ya sa na gina wa Fulani makiyaya makaranta -

10 Maintenha 202

16 Nuwamba 2021



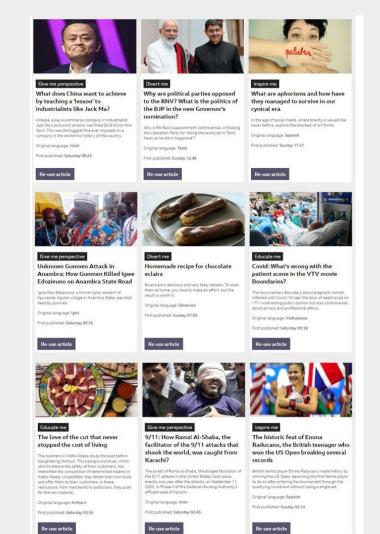
### An overview of **all** of WS content with a potential to travel further



### Goal:

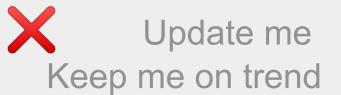
Showcasing distinct content across 43 World Service teams to facilitate and inspire onward journeys

#### 18 BBC NEWSLABS



BBC Frank Dashboard		
The farmers who turned a desert into a forest	Translating to Somali Change Save edit	Frank
For reference		
English Original: Spanish Translated To: Somali	Translation: Somali	
Rate this machine translation 👔 🙁 😐 😉	Copy URL Copy original CPS ID Copy entire edit	
Headline	Headline	into <>out of English
Los agricultores que convirtieron un desierto en un bosque	Beeraleyda oo saxaraha ka dhigay kayn	
Summary	Summary	
En una región semiárida de Bahia, en el norte de Brasil, dos agricultores han conseguido crear un bosque a partir de su suelo que estaba al borde de la desertificación, gracias a un sistema agroforestal que reproduce el funcionamiento de ecosistemas originales en cada región.	Gobolka Bahia ee waqooyiga Brazil, laba beeralay ah ayaa ku guulaystay inay kaymo ka abuuraan dhulkooda oo qarka u saarnaa inay nabaad guuraan, taas oo ay ugu wacan tahay hab-kaynta dhirta oo soo saarta shaqada hab-nololeedyada asalka ah ee gobol kasta	
Сору	Copy	Filters news needs tags
Si no puedes ver el video haz clic aquí.	Haddii aadan arki karin muuqaalka, guji halkan. Gobolka Bahia oomane ah, laba beeraley ah ayaa ku quuleystay inay kaymo ka abuuraan carradeeda	i illoro novo noodo lage
En una región semiárida de Bahía, dos agricultores han conseguido crear un bosque a partir de su suelo agotado que estaba al borde de la desertificación.	Subolika baine oorliane ani taba beeratey an ayaa ku guutey say may kayino ka abuuraan amabeeba xaalufka aho oqarka u saaran inay nabaad guuto. Swiss Ernst Gotsch iyo "ardayglisa" Nelson Araújo Filho waxay hirgeliyeen nidaamka beer-forestry kaas oo soo saara shaqeynta hab-hooleedydada asalka ah ee qobol kasta.	
El suizo Ernst Gotsch y su "alumno" Nelson Araŭjo Filho han implementado un sistema agroforestal que reproduce el funcionamiento de los ecosistemas originales en cada región.	00 sobu saka si shaqeyn na hae-muletoysad asanka ai ree guodu saka. Habkan, oo laga soo qaatay gobollo kala duwan oo Brazil iyo adduunka ah, wuxuu isku daraa wax-soo- saarka cuntada iyo dib-u-soo-celinta dhirta, soo jiidata xayawaanka duurjoogta ah waxayna ka caawisaa dib u celinta saxaraha.	

Inspire me Educate me Divert me Give me perspective





### **Next steps**

Add search functions Fine-tune filtering / affinity routes Match with analytics

#### **GoURMET = space to explore and experiment**

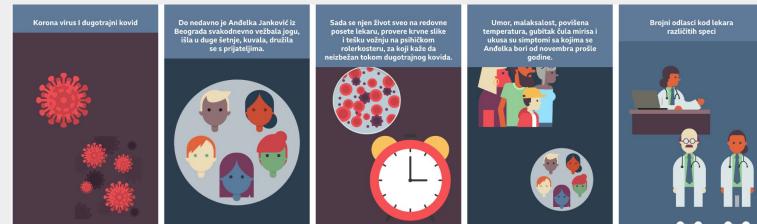
How might we use machine translation as a **facilitator** 

- a tool towards a solution

And not just an end in itself?



### Health domain use case: Multilingual Graphical Storytelling



22 BBC NEWSLABS

BBCNEWS

**BBCNEWS** 

BBCNEWS

**B B C NEWS** 

# Graphical Storytelling (GST)

### Why?

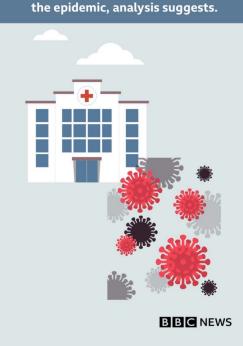
Reach underserved audiences on mobile with a more accessible story format.

Your Story 4s Coronavirus patients in hospital in England are dying at a slower rate now than they were at the peak of

...| 🌣 🗖

16:19 -

Search





**Graphical Storytelling** 

### What?

## A tool for journalists to automatically generate a graphical story from text.



Ty do new variants of Covid-19 keep appearing? Laura Foster explains

ples collected in India.

cials are checking if the variant, where two mutations come together in the ie virus, may be more infectious or less affected by vaccines.

ne 10,787 samples from 18 Indian states also showed up 771 cases of wn variants - 736 of the UK, 34 of the South African and one Brazilian.

cials say the variants are not linked to a spike in cases in India.

A new "double mutant" variant of the coronavirus has been detected from samples collected in India.

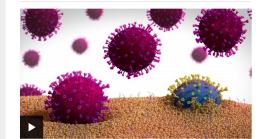
Officials are checking if the variant, where two mutations come together in the same virus, may be more infectious or less affected by vaccines.

Some 10,787 samples from 18 Indian states also showed up 771 cases of known variants - 736 of the UK, 34 of the South African and one Brazilian.



Coronavirus: 'Double mutant' Covid variant found in India

Coronavirus pandemic



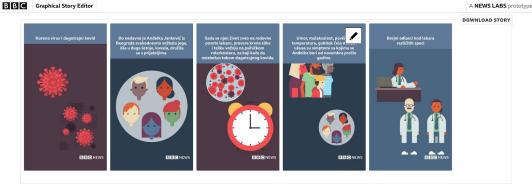
### How?

- Entity extraction
- Matching words with image and panel types: objects, quotes, organisations, speakers
- Editing interface for panel variation



# Multilingual GST

Supports 13
 languages,
 including Hausa
 and Serbian
 GoURMET
 models



#### Text in your language

Please input brief sentences in your language. Each paragraph will be displayed on a separate panel.

#### Korona virus: Kakvi su simptomi I šta radi telu

- Virus se raširio na više od 200 zemalja sveta i već mesecima traje pandemija Kovida-19.
- U zemljama bivše Jugoslavije registrovano je više od 2,55 miliona slučajeva korona virusa.
- U svetu je do sada zaraženo više od 241 milion ljudi, a preminulo je više od 4,9 miliona.
- Oporavilo se više od 219 miliona ljudi, pokazuju podaci Džons Hopkins univerziteta.

#### **English translation**

Your graphics are generated by translations here. Please correct if required. Corrections here do not amend text displayed in panels.

Corona virus: What are the symptoms and what does it do to the body?

The virus has spread to more than 200 countries in the world, and the Kovid-19 pandemic has been under way for months.

More than 2.55 million cases of the corona virus have been registered in the countries of the former Yugoslavia.

More than 241 million people have been infected worldwide so far, and more than 4.9 million have died.



### What next?

- Building a robust tool based on learnings from Frank
- Drafting a wider multilingual journalism proposal
- Facilitating a comprehensive conversation on

multilingual journalism

BBC NEWSLABS

Thank you!

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