#### Media Meets Semantic Web

How the BBC uses DBpedia and Linked Data to Make Connections

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## Problem

Large amounts of BBC online content: **TEXT, AUDIO, VIDEO**Domain specific microsites: **FOOD, GARDENING, SPORT,** etc. ...

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Figure 1: BBC microsites in June, 2009

Large amounts of BBC online content: TEXT, AUDIO, VIDEO

Domain specific microsites: FOOD, GARDENING, SPORT, etc. ...



Figure 2: BBC microsites in June, 2017

#### Not possible to...

Find **everything**, BBC has published to a given subject

Navigate between BBC domains following a **semantic thread** 

No interlinking between microsites = not using full potential of available data

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# Objectives

Make the BBC website more coherent and more useful

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Better connections and interlinking of existing systems

Soft transition and reducing impact on existing systems while adding new services to maximize interlinking of domains

1. Service to link all radio and TV programmes

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# Interlinking of concepts

#### INTERLINKING OF CONCEPTS — CIS

Legacy auto-categorization system: CIS

#### Limits:

- · Difficult to cover every single entity
- · No relations between terms are available
- Only internal identifiers

#### INTERLINKING OF CONCEPTS — DBPEDIA

Common Vocabulary: DBpedia

Interlinking of documents

#### INTERLINKING OF DOCUMENTS — MUDDY BOOTS

Identify main actors in a piece of content: Muddy Boots

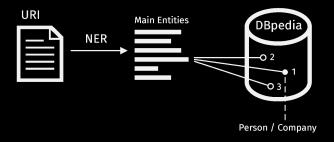


Figure 3: BBC microsites in June, 2017

# Content Link Tool

#### INTERLINKING OF DOCUMENTS — MUDDY BOOTS

Annotation tool to manually edit metadata
High quality automated suggestions

Conclusion

#### CONCLUSION

User experience in the center of efforts

Smart interlinking to internal and external resources

Well integrated and hidden systems

### Thanks for your attention!

Questions?

#### REFERENCES i

- G. Kobilarov, T. Scott, Y. Raimond, S. Oliver, C. Sizemore,
   M. Smethurst, C. Bizer, and R. Lee.
  - Media meets semantic web How the bbc uses dbpedia and linked data to make connections.
  - Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 5554 LNCS:723–737, 2009.