

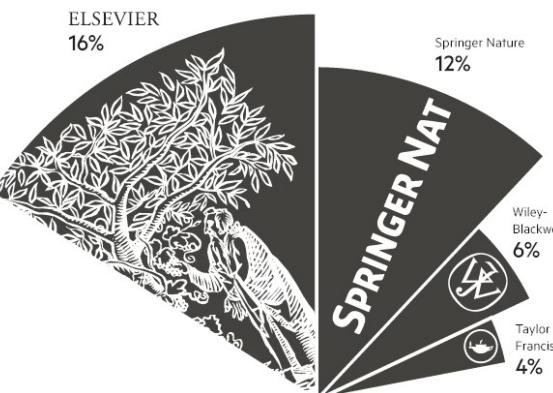
Découverte d'abréviations torturées dans des publications scientifiques

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Elsevier top of the league
Global market share of journal articles by leading publishers, 2013 (%)



Source: company
<https://www.ft.com/content/93138f3e-87d6-11e5-90de-f44762bf9896>

voice recognition



Convolutional Neural Network. Artificial Neural Networks with numerous layers are termed as Deep Neural Networks or Deep Learning. It has been explored as one another key resource in recent years and has become quite well recognized in the literary community because of its efficiency to manage with huge amounts of data [17]. The most well-known profound neural network is the Convolutional Neural Networks (CNNs), which takes its name from operation of mathematical dimension from the matrixes termed convolution. Convolutional Neural Network (CNN) has various types of layers; it includes pooling, nonlinearity, and convolutional and fully connected layers. Convolutional Neural Network has pivotal outcomes over previous decades in an assortment of fields identified with design acknowledgment, from picture handling to voice acknowledgment [18]. The significant part of CNN is to get theoretical highlights when information proliferates towards the more profound layers. For instance, in picture characterization, the edge may be distinguished in the principal layers, and afterward the less difficult shapes in the subsequent layers, and afterward the more elevated level highlights.

pubpeer.com/publications/99826B46D2BA62C9FA87CAF11AE0FD

deep neural network

pattern recognition

deep layers

high-level features



Problematic Paper Screener

Est. February 27th, 2021

<https://irit.fr/~Guillaume.Cabanac/problematic-paper-screener>



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Articles, paires de textes, textes générés,
paragraphes (paraphrasés ou non),
paires de phrases, phrases,
5-grammes, questions similaires,
annotations d'images

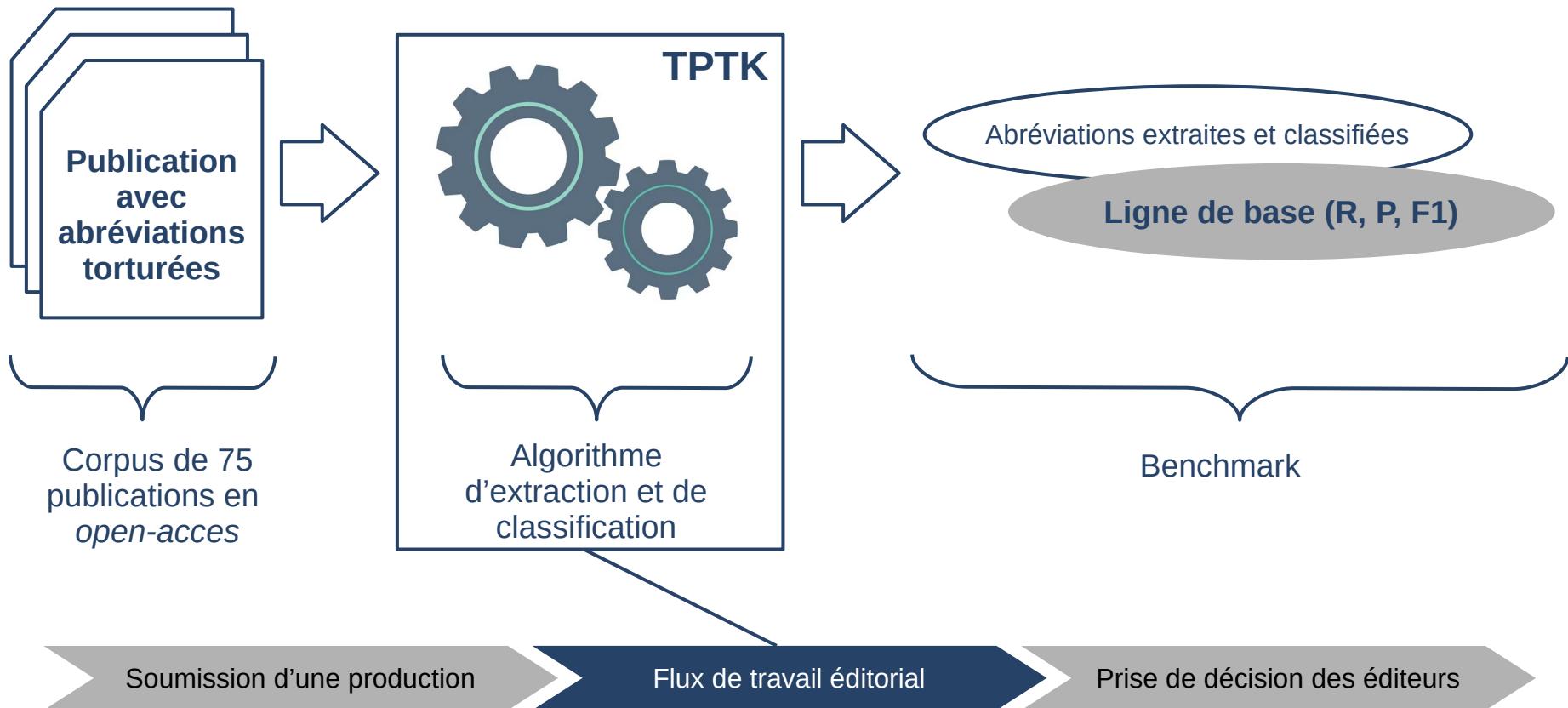
+

Modèles de plongement lexical
(GloVe, Word2vec, FastText)

Modèles de classification
(LR, SVM, NB, RF, Perceptron)

Modèles de langue
(BERT et ses variantes,
GPT-2, ELECTRA, BART,
XLNet, Longformer)

Abréviation torturée : *Bolster* Vector Machine (**SVM**) → *Support* Vector Machine (**SVM**)



Points forts de la contribution

- Approche indépendante du domaine métier
- Nécessite peu de ressources
- Traitement de documents PDF non publiés
- Pas besoin de liste d'expressions connues

Limites générales

- Propres aux études existantes
- Surestimation des abréviations
- Ne détecte pas les termes hallucinés et polysémiques
- Insensible aux néologismes

Pistes futures

- Données textuelles multilingues et de plusieurs domaines (modélisation thématique)
- Échantillons synthétiques paraphrasés et générés (à comparer avec du contenu authentique)
- Caractéristiques discriminatoires
- Identification des sources de plagiat (LMs + dictionnaires)
- Efficacité des LLMs (utilisation des RAG)

Abréviation hallucinée : *Bolster* Vector Machine (**B**VM) → *Support* Vector Machine (**S**V^M)

Terme polysémique : *Profound* Learning

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