

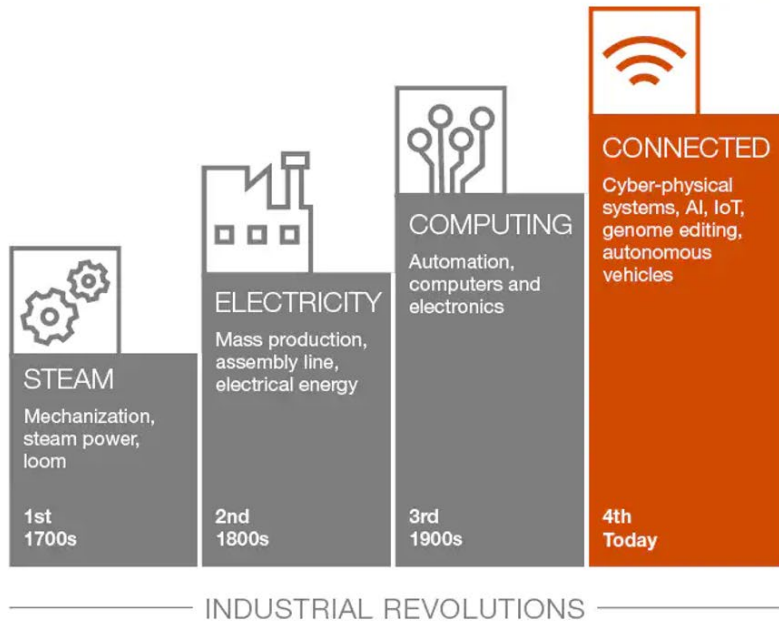
# Prof Robert J. Balfour

*“The impact of the Fourth Industrial evolution on indigenous languages as priorities for teaching and learning in higher education in South Africa.”*

17 October 2019

# 4IR & South Africa

Rectangular Snip



<https://www.pwc.com/us/en/library/4ir-ready.html>

# Higher Education and multilingualism

THINK GLOBALLY

PROMOTES A

## MULTILINGUAL LANGUAGE POLICY

COUNCIL 2018

#MyNWU It all starts here

<https://www.nwu.az.za>

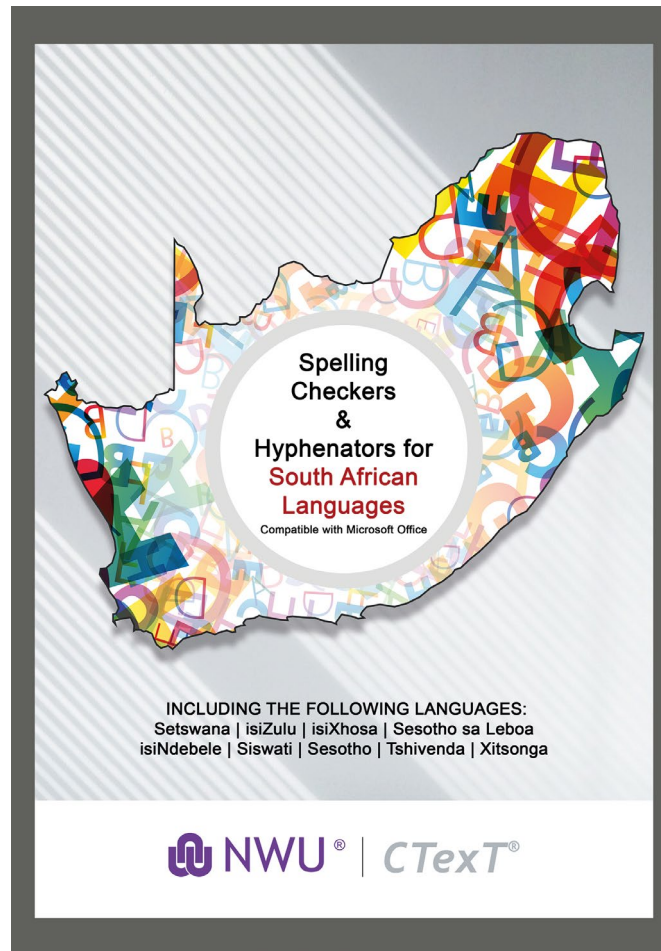
# NCHLT Web Services

The image displays two screenshots of the NCHLT Web Services interface, illustrating the input options and processing steps.

**Top Screenshot:** Shows the "Input options" section. A "Select language" dropdown menu is open, listing the following languages: Afrikaans, English, isiNdebele, isiXhosa, isiZulu, Sesotho, Sesotho sa Leboa, Setswana, SiSwati, Tshivenda, and Xitsonga. The "Select technology" field is empty. Below the input area, there is a "Clear" button, an "Upload File" button, and a "Process" button. The "Output" section is currently empty.

**Bottom Screenshot:** Shows the "Input options" section. The "Select language" dropdown is now set to "Tshivenda". The "Select technology" dropdown menu is open, listing the following technologies: Tokeniser, Sentence separator, Phrase chunker, Part of speech, Named entity recogniser, Language identifier, and Optical character recognition. The "Input" area contains the text "Enter some text or upload files." Below the input area, there is a "Clear" button, an "Upload File" button, and a "Process" button. The "Output" section is currently empty.

# CText: Spelling checkers SA Languages



# Corpus portal

4 [word="https://sadilar.vidyo.ac.za/join/E0vuLt04"] document FINISHED 0 0 [EDIT](#) [X](#)

Query results:

Hits	Documents	Grouped hits	Grouped documents	
Show <input type="text" value="50"/> per page <span style="float: right;">             &lt;&lt; &lt; 1 2 3 &gt; &gt;&gt; <a href="#">Toggle titles</a> </span>				
Page <input type="text" value="1"/> of 3 <a href="#">Go</a>				
<a href="#">Export</a>				
Context left	Hit text ▲ ▼	Context right	lemma ▲ ▼	part of speech ▲ ▼
... maleba ba bosetšhaba . Kapa	<b>Bophirima</b>	, Foreistata le Kapa Bokone ...	Bophirima	NOUN.
le le kwa godimo ga R6,000 ka kgwedi . Ka kakaretso 31.3% ya maloko a GEMS a bona kwa tlase ga R6,000 ka kgwedi ( go akaretsa le baphešenara ) . Ngwaga wa 2009 o bontshitse kgolo mo go sireletseng badiri ba ba maleba ba bosetšhaba . Kapa <b>Bophirima</b> , Foreistata le Kapa Bokone di nnile le dipalo tse di kwa godimo tsa tshireletso . Go tswa mo thadisong e e fa tlase , Kapa Bokone e nnile le palo e e kwa godimo ya kgolo ya maloko ( 53.64% ) , e latelwe ke Mpumalanga (				
... motswedi wa maatla kwa Kapa	<b>Bophirima</b>	. Dikgatlhegelo tsa Boditshabatsaba di ...	Bophirima	NOUN.
... Aforika Borwa ntle le Kapa	<b>Bophirima</b>	. Setheo sa boeteledipele jwa ...	Bophirima	NOUN.
... dingwe tsa Aforika le tsa	<b>Bophirima</b>	, ga mmogo le dintlha ...	Bophirima	NOUN.
... o o tswang ntle (	<b>bophirima</b>	) le molao wa setso ...	phirima	NOUN.
... yona dikgotlatshekelo tsa mkgwa wa	<b>Bophirima</b>	di neng di diragatsa bosiamisi ...	Bophirima	NOUN.
... Bothati jwa Sedika jwa Tembuland	<b>Bophirima</b>	2001 SA 574 ( TK ...	Bophirima	NOUN.
go Moaforika yo maikarabelo yo o ka bona e le kgobeletso mo lethakoreng la baeteledipele ba setso ka ntlha ya fa ba diragatsa dithata tsa khuduthamaga . Mo go Mhlekwa v Tlhogo ya Bothati jwa Sedika jwa Tembuland ; Feni v Tlhogo ya Bothati jwa Sedika jwa Tembuland <b>Bophirima</b> 2001 SA 574 ( Tk ) ; 2000 BCLR 979 ( Tk ) , kgotla ga e a ka ya dumalana le taolo ya Dikgotlatshekelo tsa Bothati jwa Sedika . Kgotlatshekelo e ne ya gatelela gore dingwe tsa ditiro di akaretsa dintlha tse di masisi tsa baagi mme				

# Autshumato MT Web Service



# AUTSHUMATO TRANSLATE

Machine and offline word  
translation for the  
South African languages



arts & culture

Department:  
Arts and Culture  
REPUBLIC OF SOUTH AFRICA





Source language

English

Source text

[Empty text input area for source text]

Target language

Afrikaans: Afrikaans

**Afrikaans: Afrikaans**

Xitsonga: Xitsonga

Setswana: Setswana

Sepedi: Sepedi

IsiZulu: IsiZulu

Sesotho: Sesotho

Translate



# Autshumato TM & Glossary



Filter results by:

- Type
- Glossary Source Language
- Glossary Target Language
- Translation Memory Languages
- Affiliations

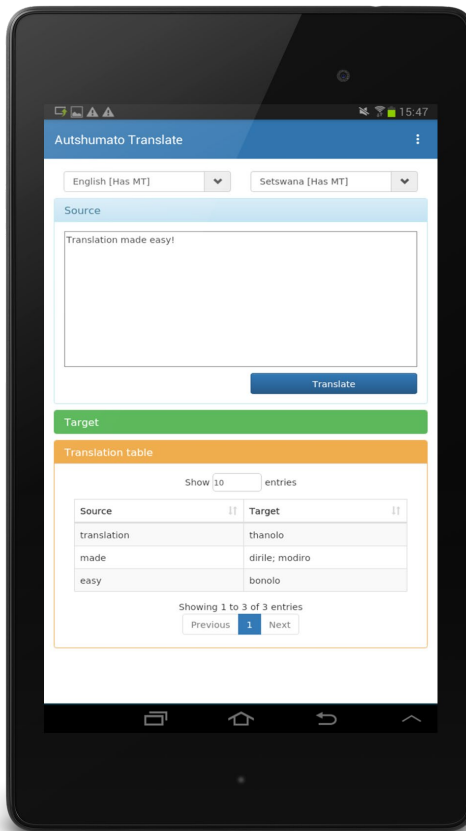
Show 10 entries

Search:

Type	Name	Languages	Affiliation	Rating	Date added	Version
Glossary	Afrikaans, Sepedi Mathematics Glossary from DAC Version 1	Afrikaans - Sepedi	Arts and Culture	0	Sep 20, 2016	1
TM	Afrikaans, English Government Translation Memory from Arts and Culture Version 1.tmx	English, Afrikaans	Arts and Culture	0	Sep 22, 2016	1
Glossary	isiXhosa, Setswana Social affairs Glossary from DAC Version 1	isiXhosa - Setswana	Arts and Culture	0	Sep 20, 2016	1
TM	Afrikaans, English, isiXhosa, isiZulu, Sepedi, Setswana Politics Translation Memory from Centre for Political and Related Terminology in Southern African Languages Version 1.tmx	English, Afrikaans, isiZulu, isiXhosa, Setswana, Sepedi	Centre for Political and Related Terminology in Southern African Languages	0	Sep 22, 2016	1
Glossary	Afrikaans, isiNdebele Information and communication technology Glossary from DAC Version 1	Afrikaans - isiNdebele	Arts and Culture	0	Sep 20, 2016	1
TM	English, isiZulu, Sepedi General Translation Memory from Arts and Culture Version 1.tmx	English, isiZulu, Sepedi	Arts and Culture	0	Sep 22, 2016	1
Glossary	Setswana, isiZulu Biology Glossary from DAC Version 1	Setswana - isiZulu	Arts and Culture	0	Sep 20, 2016	1
TM	English, Setswana Government Translation Memory from Arts and Culture Version 1.tmx	English, Setswana	Arts and Culture	0	Sep 22, 2016	1
Glossary	isiXhosa, Setswana Information and communication technology Glossary from DAC Version 1	isiXhosa - Setswana	Arts and Culture	0	Sep 20, 2016	1
TM	English, Setswana Government Translation Memory from Centre for Text Technology Version 1.tmx	English, Setswana	Centre for Text Technology	0	Sep 22, 2016	1

Showing 1 to 10 of 954 entries

# Autshumato Translate Mobile App




# Terminology Management System

The screenshot displays the Autshumato Terminology Management System interface. The browser window title is "Autshumato Terminology x". The interface includes a navigation bar with buttons for "Create Record", "Edit Record", "Delete Record", "Export", "Filter", and "Insert". A "Filter Set" indicator shows a green checkmark and "Number Of Records: (3)". The search bar contains "aloe" and "identity matrix", with a search icon and dropdown menus for "English" and "Target...".

Record ID: 13352  
Project(s): Nature

English: aloe

Definition: Any plant of the genus Aloe, usually having toothed fleshy leaves. Image:



Sound: Play Stop

Afrikaans: aalwyn  
Definition: Enige plant van die geslag Aloe, gewoonlik met getande, viesige blare.

IsiZulu: inhlaba

IsiXhosa: ichala  
Synonym: umhlaba

Siswati: inhlaba

# South African Centre for Digital Language Resources



SADiLaR's enabling function impacts at least three domains:



Language technology domain



Humanities and social sciences domain



Socio-economic domain



**CLARIN  
ERIC**

Common Language Resources and  
Technology Infrastructure

<https://www.facebook.com/SouthAfricanCentreForDigitalLanguageResources/photos/>

# Language and identity



<https://project-ttvwo-southafrica.jouwweb.nl/language>