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Corpus design for Setswana lexicography

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Co-Promoter: **Dr. Adam Kilgarriff**

Summary

This PhD thesis is about the design of a Setswana corpus for lexicography. While various corpora have been compiled and a variety of corpora-based researches attempted in African languages, no effort has been made towards corpus design. Additionally, although extensive analysis of the Setswana language has been done by missionaries, grammarians and linguists since the 1800s, none of such research is in corpus design. Most research has been largely on the grammatical study of the language.

The recent corpora research in African languages in general has been on the use of corpora for the compilation of dictionaries and little of it is in corpus design. Pioneers of this kind of corpora research in African languages are Prinsloo and De Schryver (1999), De Schryver and Prisloo (2000 and 2001) and Gouws and Prisloo (2005).

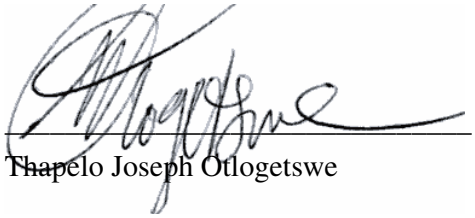
Because of a lack of research in corpora design particularly in African languages, this thesis is an attempt at filling that gap, especially for Setswana. It is hoped that the finding of this study will inspire similar designs in other languages comparable to Setswana.

We explore corpus design by focusing on measuring a variety of text types for lexical richness at comparable token points.

The study explores the question of whether a corpus compiled for lexicography must comprise a variety of texts drawn from different text types or whether the quality of retrieved information for lexicographic purposes from a corpus comprising diverse text varieties could be equally extracted from a corpus with a single text type. This study therefore determines whether linguistic variability is crucial in corpus design for lexicography.

Declaration

I declare that **Corpus design for Setswana lexicography** is to the best of my knowledge and belief, my original work. All the sources that I have used or quoted have been indicated and acknowledged by means of complete references. The material has not been submitted, either in whole or part, for a degree at this or any other university.



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Abbreviations

BNC	British National Corpus
CDIF	Corpus Development Interchange Format
CI	Confidence Interval
CLAWS	Constituent Likelihood Automatic Word-tagging System
COBUILD	Collins Birmingham University International Language Database
CQS	corpus querying software
DDP	Dictionary Development Process
HLT	Human Language Technology
HTML	Hyper-text mark-up language
JFIT	Joint Framework for Information Technology
KWIC	Key Word in Context
LDOCE	Longman Dictionary of Contemporary English
LMS	London Missionary Society
LOB	Lancaster/Oslo-Bergen Corpus
MD	Multi-Dimensional
MWE	multi-word expression
NLP	Natural Language Processing
OED	Oxford English Dictionary
POS	Part of speech
RNPE	Revised National Policy on Education
RRC	Russian Reference Corpus
SCA	Simple Consistency Analysis
SDA	Seventh Day Adventist
SGML	Standard Generalized Mark-up Language
SIL	Summer Institute of Linguistics
STTR	Standardized type/token ratio
TEI	Text Encoding Initiative
TSB	Traditional Setswana Beliefs
TTR	Type/token ratio
WWW	World Wide Web
XML	Extensible Mark-up Language

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