German Lutheran Missionaries and the linguistic description of Central Australian languages 1890-1910

David Campbell Moore B.A. (Hons.), M.A.

This thesis is presented for the degree of Doctor of Philosophy of The University of Western Australia School of Social Sciences Linguistics 2019
Thesis Declaration

I, David Campbell Moore, certify that:

This thesis has been substantially accomplished during enrolment in this degree.

This thesis does not contain material which has been submitted for the award of any other degree or diploma in my name, in any university or other tertiary institution.

In the future, no part of this thesis will be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of The University of Western Australia and where applicable, any partner institution responsible for the joint-award of this degree.

This thesis does not contain any material previously published or written by another person, except where due reference has been made in the text and, where relevant, in the Authorship Declaration that follows.

This thesis does not violate or infringe any copyright, trademark, patent, or other rights whatsoever of any person.

This thesis contains published work and/or work prepared for publication, some of which has been co-authored.

Signature:

[Blank space for signature]

15th March 2019
Abstract

This thesis establishes a basis for the scholarly interpretation and evaluation of early missionary descriptions of Aranda language by relating it to the missionaries’ training, to their goals, and to the theoretical and broader intellectual context of contemporary Germany and Australia.

The sources that are examined are the grammars, dictionaries, texts and translations that were compiled between 1890 and 1910.

German Lutheran missionaries established the Hermannsburg Mission at Ntaria in the Northern Territory of South Australia in 1877, and began to learn, translate and describe the Aranda and Luritja languages. The primary aim of the missionaries was the translation of the Bible and hymn books, for which they undertook lexical and grammatical analyses of the target languages. The missionary Reverend Hermann Kempe, who was trained at Hermannsburg Mission Institute in Germany, published a detailed grammatical description and wordlist, and religious translations into Aranda. His successor Carl Strehlow was trained at Neuendettelsau Mission Institute in Franconia (Bavaria). With the guidance of a mentor in Germany, Freiherr Moritz von Leonhardi, Strehlow also undertook research with a more scholarly focus, collecting a large number of Aranda and Luritja traditional texts which were published in the journal *Globus* and in his *Die Aranda*. A dictionary and grammar were intended as part of this collection but were not published.

The thesis consists of two parts. The first focuses on the missionaries’ training and its intellectual context:

**Paper 1:** The missionaries were influenced by the Lutheran Reformation with Martin Luther’s focus upon authentic translation into vernacular languages, critical for the development of translation theory in Germany. Luther’s successor Phillip Melanchthon enshrined humanism in Lutheran education with a strong focus upon the study of ancient languages.

**Paper 2:** Missionary translation and philology was closely connected with theology. Rather than predecessors of modern anthropologists, they are more accurately described as ‘cultural
translators’. At times, the research goals of missionaries were in conflict with their role as missionaries.

**Paper 3:** The Ntaria missionaries brought to Australia language ideologies which were characteristic of the German philosophy of language promoted by the Lutheran philosopher JG Herder. These included the inseparability of language and thought, the importance of actual language use as a basis for learning and analysis, and the complexity and diversity of languages.

**Paper 4:** This tradition developed the science of philology to a pinnacle in Germany, from where it was extended from the classical and biblical languages to languages of India, Africa, the Americas and Australia. It was taught with theology in the mission institutes.

**Paper 5:** The linguistic work of the Ntaria missionaries and their humanist philology stands in contrast to that of other researchers of Central Australian languages who adopted an increasingly positivist orientation to linguistic research, influenced by the natural sciences.

The second part of this thesis focuses on specific aspects of Aranda language in missionary descriptions and translations:

**Paper 6:** The missionaries attempted to develop theological key terms for Aranda. They adopted *Altjira* as ‘God’, a problematic choice for Aranda which was not adopted for other languages. Continuing Kempe’s work, Strehlow initially focused upon lexical development in religious translation, replacing loanwords with Aranda terms.

**Paper 7:** The incommensurability and untranslatability of terms between Aranda and German is explored, focusing upon Strehlow’s realisation that ‘Dreaming’ was a mis-translation of *Altjira*.

**Paper 8:** Strehlow’s grammatical analysis is known from his unpublished materials, and a short published response to another grammatical description. His texts and translations better reveal Strehlow’s understanding of the grammar. Strehlow’s Neuendettelsau training facilitated his understanding of complex clauses and syntax which can be traced to the explicit teaching of grammar there.
Paper 9: The interlinear texts in Strehlow’s seven volume *Die Aranda und Loritja-Stämme in Zentral-Australien* are the most outstanding contribution of the Neuendettelsau missionaries to the linguistic description of Central Australian languages but require interpretation because of the way that they were recorded and edited.

Paper 10: Uniform orthographies were used to represent the sounds of Australian languages decades before the elaboration and widespread use of phonetic alphabets in Australia.

Paper 11: The Ntaria missionaries developed a uniform orthography to represent the language. The Mission orthography is different in nature to the modern phonemic orthographies of Aranda, but a comparison reveals the missionaries’ systematic and principled approach to writing Aranda.
# Table of Contents

Thesis Declaration iii  
Abstract iv  
Acknowledgements; Learning Languages ix  
Thesis papers; Travels and Talks xiii  
Authorship Declaration: Co-authored Publication xvi  
Map of Central Australia xvii  
Introduction 1  
Timeline 18  
1. The Reformation, Lutheran tradition, and missionary linguistics 21  
2. Translation in Indigenous Cultures 39  
3. Language ideologies in Central Australia 1890-1910: reflections of the German philosophy of language 79  
4. The formation of Central Australian missionary linguists 101  
5. Crosscurrents in Linguistic research: Humanism and Positivism in Central Australia 1890-1910 147  
6. The wanderings of Altjira, Christianity and the translation of sacred words in Central Australia. 167  
7. Altjira, Dream and God. 196  
Texts and grammar 228  
8. Developments in the grammatical analysis of Central Australian languages 1890-1910 230  
9. Legends living in narratives: Texts in the documentation of Central Australian Languages 1890-1910 294  
Phonetics and orthography 320  
. 10. Uniform orthographies and phonetics in Central Australia 1890-1910 322  
. 11. The Mission Orthography in Carl Strehlow’s Dictionary 355  
Conclusion 397
Acknowledgements

This research was supported by an Australian Government Research Training Program (RTP) Scholarship from 2014 to 2017. Overseas travel was supported by Student Travel Grants.

I would like to thank my supervisors at University of Western Australia, Dr John Henderson and Associate Professor Marie-Eve Ritz for their invaluable help with completing this thesis. Marie-Eve has particularly assisted me with understanding grammar and the European language background of the missionaries. John’s detailed knowledge of Arrernte has been of critical importance to the research. I am privileged to learn from them. My mentors have guided me through the first completed thesis by publication for UWA Linguistics and the first UWA Linguistics *viva voce* examination.

An occasional visitor to the Crawley Campus, I have worked 2500 km away in the Central Desert region of the Northern Territory. That has meant that my contact with UWA Linguistics has been an important connection to the discipline. Early drafts of the thesis publications were presented at four Postgraduate Seminars held in the Department of Linguistics at UWA. I have learned much from Postgraduate Seminars at UWA since I started Postgraduate study there in 2005. Dr Celeste Rodriguez Louro organised seminars on using technology and social media. Dr Maïa Ponsonnet advised on two draft papers. Fellow candidates were Daniel Midgely and Luisa Miceli and fellow Postgraduate Office Room 2.51 dwellers Sophie Richard, Sana Bharadwaj, Amanda Hamilton-Hollaway and Connor Brown. Amy Budrikis was also on the Limina committee at UWA which organised the conference in which I participated in July 2017. I wish to thank all the staff at the Graduate Research School, the Faculty of Arts and School of Social Sciences for help over the years and the staff at the Reid Library at UWA.

Former UWA Postgrad Peter Hill rang from Port Hedland every two weeks with important encouragement and advice: “Write!” He had lived at Ltyentye Apurte (Santa Teresa) and was familiar with Eastern Arrernte. When I started this research he was working at Wangka Maya Language Centre in Port Hedland. Sadly, he passed away in 2018 as the final drafts of this thesis were being written.

I benefited greatly from learning the Arrernte language while writing this thesis which has helped me to understand the complexity of the Arrernte language. I am grateful to Margaret Smith, Theresa Alice, Carol Turner, Louise Webb, Jannette McCormack, Margaret Kemarre Turner and many other Arrernte people for their insights into the structure of the language.
Dr Peter Lockwood, editor of the Lutheran Theological Journal and my teacher of Hebrew at Australian Lutheran College in the mid-1990s, encouraged me to write the first paper of this thesis collection.

I stayed with my parents Dr Richard and Kath Moore at North Fremantle on trips to UWA. They first encouraged me to learn German in 1974 and my interest in German started again in 2012. Particularly helpful were the discussions around the 500th anniversary of the Reformation. There have been many discussions about my father’s specialist field of New Testament textual research for which linguistic evidence has been critical and also about interpretation, textual criticism and translation theory. This has been foundational to my research.

At the Lutheran Archives in Adelaide Rachel Kuchel, Jannette Lange and Lyall Kupke facilitated my access to historical documents. Lois Zweck has provided feedback on early drafts. At Neuendettelsau in Germany I was guided by Gernot Fugmann. I learned about the remarkable Friedrich Bauer from Hans Rössler, Elisabeth Fuchshuber-Weiß, Hermann Vorländer. At Hermannsburg in Lower Saxony I was hosted by Hartwig and Christa Harms.

This was critical to writing the second paper in this collection. Victoria Ríos Castaño has been an excellent co-author. Thanks to editors for their patience: Sue-Ann Harding and Ovidi Carbonell y Cortes (Routledge Handbook), Sabine Dedenbach Salazar-Sáenz (Academia) and Nicola McLelland (Language and History).

I stayed in Scotland with Professor James and Valerie Cox in 2015. Jim encouraged me to participate in the Religions Colloquium at Stirling in December 2015 and to contribute a chapter to a volume which he edited with Adam Possamai.

Jean-Michel Fortis, Floris Solleveld and Otto Zwartjes have helped my understanding of the history of linguistics.

The staff of the Strehlow Research Centre have helped me to find sources. Thanks to Adam McFie, Shaun Angeles, Felicity Green and Nicole Haverfield and particularly to former librarian Graeme Shaughnessy. I appreciate the contribution of Anna Kenny to the Carl Strehlow Dictionary and was glad to be involved in the project. Amanda Lissarrague has facilitated my access to the AIATSIS collections.

John Strehlow has played an important part in this research. His monumental work about his grandmother Frieda (Keysser) Strehlow and his incomparable research for the details of Central
Australian history has informed the historical basis for this thesis. Many insights have been gained with his support. The Friends of the Strehlow Research Centre was established on 26th September 2014, 120 years to the day after Carl Strehlow’s departure from Bethesda at Lake Killalpaninna to travel to Hermannsburg in the Northern Territory. The Friends, particularly David and Margaret Hewitt OAM, Olga Radke OAM and Margaret Gaff continue to work for the preservation and promotion of Central Australian history, especially that which is housed at the Strehlow Research Centre. They have brought history to life through a series of anniversaries and expeditions to Henbury, Jay Creek and Lake Killalpaninna. The work of Ken Hansen AM and Lesley Hansen AM in linguistics is outstanding. I thank Ken for insights into the importance of language learning and meaning-based translation. Pastor Paul Albrecht OAM, Garry Stoll, Pastor Hans Oberscheidt, David and Lily Roennfeldt have enhanced my knowledge of Western Arrarnta. Over the years I have learned more of Arandic languages from Gavan Breen, Jenny Green, David Blackman and David Strickland.

James McElvenny and Clara Stockigt have organised conferences of the Society for the History of Linguistics in the Pacific (SHLP) which were critical to presenting this research. Three gatherings held in Alice Springs (2014), Potsdam (2016) and Adelaide (2018). The History and Philosophy of the Language Sciences blog which James organises is invaluable for history of linguistics research.

Thanks to my family, Sam, Sarah and Jacob and, above all, thanks to my wife Susan, a descendant of German settlers at Bethany in the Barossa Valley of South Australia and a passionate advocate for Aboriginal language education in her role as Principal of the Alice Springs Language Centre.

I wish to see the enormous contribution of the Germans to Australian language research more widely recognised and the German philosophy of language to be revived and promoted in this country. The injunction to ‘seek wisdom’ accords with the motto of the University of Western Australia, deriving from the Hebrew book of Proverbs, Chapter seven and verse four:

בִּינְהָ׃ קְנֵה קִֵ֝נְי נְך ָ֗ וּבְכ ל־ ח כְמ ָ֑ה קְנ ֵ֣ה ח ָ֭כְמ ה ר אֶשִִ֣ית

‘Wisdom is the principal thing; therefore get wisdom: and with all your getting, get understanding’

SOLI DEO GLORIA

David Moore
Learning Languages

The centrality and importance of language in the German philosophy of language, to intercultural understanding, and to everyday life in multicultural Australia is a key component of this thesis, especially in the Northern Territory where approximately 57,000 people speak at least one Aboriginal language. I came to the thesis project able to speak the Alyawarr language of the Sandover and Barkly regions which are northeast of Alice Springs. In 1995 when I first started learning Alyawarr I was also in contact with Arrernte speakers at Alcoota and Harts Range. For many years I have interacted with speakers of Arandic varieties including Eastern and Central Arrernte, Western Arrarnta, Anmatyerr and Kaytetye firstly during my work as a translator and linguist with the Finke River Mission in the Sandover region of Central Australia (1995-2006) and later as an Education Department linguist (since 2012). I have worked as a NAATI-certified Alyawarr interpreter for the Aboriginal Interpreter Service since 2009. I have also lived for three years in Western Desert communities and retain knowledge of Ngaanyatjarra and Martu Wangka and more recently have learned related languages such as Luritja.

From early 2015 I have taught Eastern and Central Arrernte at the Alice Springs Language Centre, an organisation which teaches Languages Other Than English (LOTE) in primary and secondary schools in Alice Springs. I was privileged to work with Margaret Smith who sadly passed away in October 2018. Her enthusiasm for teaching Arrernte and competence in the language was a great inspiration to many, particularly her Arrernte students. Carol Turner has helped me to understand what I am hearing. Joel Liddle challenged me to go further in understanding of Arrernte. I have recently worked with Western Arrarnta speaker Jannette McCormack, whose many insights into Aboriginal Education I greatly appreciate. During this time I also worked on the second edition of the Alyawarr to English Dictionary (published 2019) and contributed comments for the revision of the Eastern and Central Arrernte to English Dictionary, two projects sponsored by AIATSIS during the International Year of Indigenous Languages. This language engagement has been critical to my research for this thesis.
My interest in learning German revived in 2012 with a family visit to Germany. A large number of German books are referenced in this thesis, probably around one hundred. Many of these are unavailable in Australian libraries. There are also many important documents which have not yet been translated into English.

During my candidature I studied Ancient Languages: Hebrew and Greek at the Macquarie Ancient Languages Summer and Winter Schools (MALS) from mid-2013 and Latin at the Sydney Latin School for the purpose of understanding the philological background to missionary linguistics. Dr Trevor Evans and Dr Genevieve Young-Evans organised for me to teach an Introduction to Australian Languages at MALS in 2019. I am grateful to Stephen Coxhead (Hebrew and Aramaic), Emmanuel Roumanis (Classical Greek) and John Sheldon (Sanskrit) for language instruction which has been important for this research.
Thesis papers in German Lutheran Missionaries and the linguistic description of Central Australian languages 1890-1910.

<table>
<thead>
<tr>
<th>Title</th>
<th>Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. The formation of Central Australian missionary linguists</td>
<td></td>
</tr>
<tr>
<td>8. Developments in the grammatical analysis of Central Australian languages 1890-1910</td>
<td></td>
</tr>
</tbody>
</table>
**Travels and Talks**

The timing of this thesis coincided with two major commemorations. The first was the five hundredth anniversary in 2017 of the Protestant Reformation, an event which had massive effects on religion and education in the Western world. In 2015, 2016 and 2017 I visited Luther sites at Wittenberg, Erfurt and Coburg in Germany, learning more about the background to the Protestant Reformation. In 2016 I visited Halle to learn more about the influence of Pietism, missions and the history of Bible translation. I visited Hermannsburg and Neuendettelsau to research their mission institutes. I attended the Luther 500 Conference in Melbourne in 2016 and discussed the philosopher of language J.G. Hamann with Professor Oswald Bayer of Tübingen in Germany when he visited Alice Springs in 2016.

The second commemoration was 2014-2018, the centenary of the First World War which was a time of existential crisis for Lutheran missions in South Australia.

As a PhD Candidate from 2014 to 2019 I gave the following talks:

<table>
<thead>
<tr>
<th></th>
<th>Event</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Altjira, God and Dreaming</td>
<td>October 2014</td>
<td>University of Western Sydney Religions Roundtable, Sydney</td>
</tr>
<tr>
<td>2</td>
<td>Missionary linguistics.</td>
<td>23 September 2014</td>
<td>Society for the History of Linguistics in the Pacific SHLP4 Conference, Alice Springs</td>
</tr>
<tr>
<td>3</td>
<td>Altjira, God and Dreaming 2</td>
<td>24 September 2014</td>
<td>Strehlow 2014 Conference, Alice Springs</td>
</tr>
<tr>
<td>4</td>
<td>Missionary linguistics 2</td>
<td>3 October 2014</td>
<td>UWA Linguistics seminar 2014, Perth</td>
</tr>
<tr>
<td>5</td>
<td>The meaning of Altjira</td>
<td>January 2015</td>
<td>Macquarie University School of Ancient Languages Summer School, Sydney</td>
</tr>
<tr>
<td>6</td>
<td>Lutheran Missions and World War I Centenary</td>
<td>18 April 2015</td>
<td>Friends of the Strehlow Research Centre, Alice Springs</td>
</tr>
<tr>
<td>7</td>
<td>Uniform alphabets in Central Australia</td>
<td>July 2015</td>
<td>Phonetics and phonology workshop, Campfire in the Heart, Alice Springs</td>
</tr>
<tr>
<td>8</td>
<td>Linguistics in nineteenth century Germany</td>
<td>18 September 2015</td>
<td>UWA linguistics seminar, Perth</td>
</tr>
<tr>
<td>9</td>
<td>Aranda Letters and Postcards</td>
<td>21 September 2015</td>
<td>Friends of the Lutheran Archives, Adelaide</td>
</tr>
<tr>
<td>10</td>
<td>Christianity, Altjira and cultural translators</td>
<td>7 Dec 2015</td>
<td>Translating Christianities Colloquium, Stirling University, Scotland UK.</td>
</tr>
<tr>
<td>No.</td>
<td>Event</td>
<td>Date</td>
<td>Location</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------</td>
<td>---------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11</td>
<td>Christianity, Altjira, and cultural translation'</td>
<td>January 2016</td>
<td>Macquarie School of Ancient Languages Summer School, Sydney</td>
</tr>
<tr>
<td>13</td>
<td>Strehlow Research Centre Collection-documents</td>
<td>19 July 2016</td>
<td>Concordia College Tour of Strehlow Research Centre, Alice Springs</td>
</tr>
<tr>
<td>14</td>
<td>German philological influences in twentieth century Australian fieldwork</td>
<td>21 August 2016</td>
<td>Sutton Celebration, Adelaide University</td>
</tr>
<tr>
<td>15</td>
<td>Missionary Linguistics 3</td>
<td>September 2016</td>
<td>UWA Postgraduate Seminar, Perth</td>
</tr>
<tr>
<td>16</td>
<td>Missions and philological fieldwork in Australia 1890-1910</td>
<td>September 2016</td>
<td>SHLP5 Conference, Potsdam, Germany</td>
</tr>
<tr>
<td>17</td>
<td>Missionary fieldwork in the Linguistics Landscape of Central Australia 1890-1910</td>
<td>September 2016</td>
<td>Henry Sweet Society Colloquium Pembroke College, Cambridge University, England</td>
</tr>
<tr>
<td>18</td>
<td>Mediopassive in Central Australian Languages</td>
<td>9 December 2016</td>
<td>Australian Linguistic Society Conference Monash University, Melbourne</td>
</tr>
<tr>
<td>19</td>
<td>Myth and Memory in Central Australian Texts</td>
<td>27 July 2017</td>
<td>Limina Conference, St. Catherines College, University of Western Australia, Perth</td>
</tr>
<tr>
<td>20</td>
<td>Linguistic Fieldwork in Central Australia in the early twentieth century</td>
<td>1 September 2017</td>
<td>ICHoLS XIV Conference, Sorbonne Nouvelle, Paris</td>
</tr>
<tr>
<td>21</td>
<td>The contribution of German missionaries to linguistics and translation</td>
<td>15 January 2018</td>
<td>CGLP Colloque, Ecole Normale Supérieure, Paris</td>
</tr>
<tr>
<td>22</td>
<td>Developments in grammatical analysis</td>
<td>16 March 2018</td>
<td>UWA Linguistics Seminar, Perth</td>
</tr>
<tr>
<td>23</td>
<td>Missionary Linguistics and Translations in Central Australia 1890-1910</td>
<td>24 March 2018</td>
<td>Missionary Linguistics X Sapienza University, Rome</td>
</tr>
<tr>
<td>24</td>
<td>The history of Dreaming as a an etymological illusion</td>
<td>6 September 2018</td>
<td>Henry Sweet Colloquium, Maynooth, Ireland.</td>
</tr>
<tr>
<td>25</td>
<td>Language at the Centre</td>
<td>13 March 2019</td>
<td>Top End Linguistic Circle meeting, Charles Darwin University, Darwin</td>
</tr>
</tbody>
</table>
## Authorship Declaration: Co-authored Publication

This thesis contains work that has been published.

### Details of the work:


Location in thesis:

Student contribution to work:
Approximately 50% of the text and references.

Co-author signatures and dates:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14.03.2019</td>
</tr>
</tbody>
</table>

### Student signature:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15.03.2019</td>
</tr>
</tbody>
</table>

I, Marie-Eve Ritz certify that the student’s statements regarding their contribution to each of the works listed above are correct.

Coordinating supervisor signature: _______________________

Date: 15.03.2019
The map shows the languages of Central Australia (see marked area on the map of Australia) in the Northern Territory of Australia (NT), which are mentioned in this thesis. The Arandic languages are Western Arrarnta, Eastern and Central Arrernte, Anmatyerr and Alyawarr and form a dialect continuum across Central Australia and far Western Queensland (QLD). The Western Desert languages occur to the south and to the west of the Arandic languages in the Northern Territory, South Australia (SA) and Western Australia (WA).
**Introduction**

This thesis examines the linguistic contribution of German Lutheran missionaries who published linguistic descriptions and translations of Central Australian languages between 1890 and 1910.

Aware of what had happened to other Aboriginal people in colonized parts of Australia, Kempe (1891: 1) wrote pessimistically about the ‘extinction at no very remote period’ of Central Australian Aboriginal people. But McGregor (1997: 116) captures the extent of missionary involvement and achievement in Australia, “more than anyone else, Christian missionaries had maintained some faith in Aboriginal prospects for survival, even when majority white opinion leaned heavily toward the doomed race theory”. The missionaries regarded Aboriginal people as “human beings who had souls, religion and language” (Veit 1994: 82). The distinction should be drawn between “the empirical scientist and the philologist, or phenomenologist of religion and mythologist for whom a Darwinist had neither understanding nor regard” (Veit 1994: 85). In a largely monolingual Anglophone nation, missionaries were some of the few non-Indigenous people who became interested in Aboriginal languages. In Australia, as elsewhere, it was the missionaries who were most inclined to develop a disciplined interest in Aboriginal languages (Roberts 2008: 109). There is a fundamental difference between the linguistic work of the Lutheran missionaries and some of their contemporaries, based upon their humanist training in translation and philology, their respect for Aboriginal languages, and their concern to learn and to describe those languages.

I consider Walter Veit’s (1991: 129) quest to find the ‘cognitive framework of the missionaries’, to be a starting point from which this thesis attempts to provide a guide to the context of their research and their times and a sound basis for on-going interpretation.
of their works. The present research explores their training, linguistic ideologies, theoretical bases and research.

Instead of ‘evolutionary hierarchies’ (Penny and Bunzl 2003: 11) missionaries were primarily interested in particular aspects of language which required years of study. As Henderson (2013:ii, Preface) argues: ‘the scholarly description of a language, especially where the linguist is not a native speaker, really requires a very large collection of data that can probably only be developed over numerous individual research projects conducted over a long period’. I argue that this is the case for Central Australia where the formative work of the Hermannsburg missionaries has been critically important for the description of Central Australian languages over more than a century from 1877 to the present. This thesis is an attempt to assess their current relevance for the linguistic description of Central Australian languages. I investigate how the missionary linguistic work laid the foundation for the linguistic researchers who followed them.

In the following sections I discuss the context to Central Australian missionary linguistics as an introduction to the papers which follow.

1 Sources

1.1 Historical and general background

The period of serious linguistic work in the Arandic languages began over 140 years ago with the arrival of Lutheran missionaries in Central Australia. The first missionaries to Central Australia were sent by the Hermannsburg Mission Institute in Lower Saxony in Germany. Their first establishment was at Lake Killalpannina near Lake Eyre in South Australia in 1867. Their journey from Bethanien (Bethany) in the Barossa Valley in South Australia to the Finke River took twenty-two months. Hermann Kempe and Wilhelm
Schwarz established a base camp on the Finke River on the 8th June 1877 (Harms 2003: 116) at a location which they named ‘Hermannsburg’ and which is still also known by the Aranda name Ntaria. They were joined by Louis Schulze in 1878. The mission was intended to be financially self-supporting but this was not the case (Harms 2003: 129). Food and supplies were very expensive and there were many crises and disappointments. The missionaries were active in learning Aranda and using it in their educational and religious materials and activities. Kempe published a worship book and a grammar and wordlist in 1891. Kempe and Schulze remained at the mission station in Central Australia until 1891 when disagreements over doctrine and the withdrawal of financial support to the missionaries led to their departure. They were succeeded by temporary caretakers until the arrival of Carl F. T. Strehlow (1871-1922), who was sent to Australia by the Neuendettelsau Mission Institute near Nürnberg (Franconia) in Bavaria, Germany. Strehlow’s arrival heralded the arrival of a new era at the Hermannsburg Mission. At the Bethesda Mission at Lake Killalpannina in South Australia he had worked with Johann Georg Reuther on the translation of the Dieri New Testament, taking the leading role in the translation work (J. Strehlow 2011: 331). At Hermannsburg, Strehlow was highly productive. He revised Kempe’s Aranda hymnbook (Strehlow 1904). His collaboration with Freiherr Moritz von Leonhardi (1856-1910) resulted in the publication of *Die Aranda- und Loritja-Stämme in Zentral-Australien* [The Aranda and Loritja Tribes in Central Australia]¹, a comprehensive collection of texts, language and culture descriptions which were published in five volumes (consisting of seven parts) between 1907 and 1920. Between 1913 and 1919 he translated the New Testament into Aranda. However, Strehlow became chronically ill and left the Hermannsburg Mission in 1922, dying at Horseshoe Bend on the way to seeking medical treatment. His successor, Friedrich

---

¹ Often referred to by Arandist scholars as simply ‘Die Aranda’.
Albrecht, did not arrive at Hermannsburg until 1926, and there was a hiatus in linguistic research until Carl Strehlow’s son Theodor (T.G.H.) Strehlow returned to Central Australia as a linguistic fieldworker in 1932. T.G.H. Strehlow built upon the missionary foundation, extending research to more languages and dialects in the Arandic language group. He devised a new phonetic alphabet for writing Aranda sounds and used a Word and Paradigm approach to grammar, which was consistent with linguistic theory and practice of that time (Moore 2008). Strehlow’s *Aranda Phonetics and Grammar* was virtually unique in Australia and a ‘milestone in Australian linguistics’ (Wilkins 1989:18). It, in turn, laid the groundwork for later research on Arandic dialects. Notably, Colin Yallop’s (1977) description of Alyawarr was cast in a more modern theoretical framework but was explicitly influenced by Strehlow’s grammar. Yallop’s work represents the first analysis of an Arandic language according to a phonemic and morphemic analysis (Wilkins 1989: 19) according to the Structuralist linguistic methods which transferred from the USA to Australia in the 1950s (Moore 2008).

1.2 The state of knowledge about Australian languages around 1900

This section outlines works on Central Australian languages as they were known in the last decade of the nineteenth century. The Arandic languages have been studied since the arrival of European settlers in the Northern Territory of South Australia in the 1860s. Settlers and explorers compiled short wordlists. Schmidt (1919), surveying the research that was done in the whole continent of Australia, lists sources for Arandic dialects and Western Desert languages. His classification ‘The Aranda Languages’ (*Die Aranda Sprachen*) included similar varieties that are now classified as the Arandic group. In the first phase of linguistics in Central Australia, researchers wrote sounds according to uniform orthographies and used an analysis of the grammar largely based upon that
devised for the classical languages Latin and Greek. As for Aranda, Schmidt (1919: 187-189) said that the works from Kempe (1891) onward were ‘completely comprehensive and sufficient material’ that was based, ‘both in words, in grammatical data, and in texts, in order to elaborate a fairly adequate picture of the language’. He (1919: 33) described them as ‘accurate sketches of the grammar’ with larger vocabularies than previous works. The existence of the Western Desert group of languages (Black 1983) was hardly known at this time. Kempe (1891) hadn’t recorded the Luritja language although he was aware of its existence:

The difficulty is increased by the close proximity of another tribe, for south of the Finke the natives speak a different language altogether, as their words terminate in i and u and au, whilst the others [ie Aranda] terminate all in a. (Kempe 1891, Summary)

As Basedow (1908: 207) said, ‘almost nothing is known of the Aluridja tribe’. Strehlow was the first researcher to record a large amount of data from a Western Desert language, which included a grammar, wordlist and texts.

1.3 The Timeframe 1890-1910 and context

The opening date of the period examined in this thesis approximates the compilation of Kempe’s (1891) grammar. The timeframe is relevant because it was during the first decade of the twentieth century that controversies arose about the Aranda and their status as ‘primitive’ people. As Schmidt (1908: 866) explains, the Aranda were ‘der meisten umstrittenen Stämme Australiens’ [the most disputed of the Australian tribes]. The importance of the Aranda for European scholarship in the first decade of the twentieth century led to attempts to understand Aboriginal societies. European scholars including Durkheim, Freud and Mauss sought answers to theoretical issues of human society and the mind in Central Australian research. Their theoretical questions were catalysts for linguistic research, the collection of texts and the writing of grammars and wordlists. Further, Malinowski (1913) estimated that half of the theoretical work in the years since
the publication of Spencer and Gillens’ *Native Tribes of Central Australia* (1899) had been based upon their works, and that nine-tenths had been affected or modified by it. It was immensely influential amongst anthropologists (Stocking 1995: 96). Schmidt (1908: 867) outlines the issues in particular that were unresolved. The question whether they recognised a God led to a dispute about the meaning of the Aranda term ‘Altjira’. Another issue was the so-called ‘nescience’ or ignorance of the connection between sex and conception. Another concerned the belief in the reincarnation of ancestors. Finally, there was discussion of totems which were not hereditary nor based upon the marriage classes but based upon increase ceremonies. These and other controversies stimulated research as the missionaries sought to answer questions about Aboriginal languages and cultures. The need to resolve disputes led to the call for accurate information about the languages which they were uniquely able to provide. The fact that Strehlow was to publish significant studies of Aranda religion, the only other major anthropology of this area, was to ‘compound the rancour which developed between [anthropologist Baldwin] Spencer and the Lutheran authorities, for they conflict with his own interpretations’ (Mulvaney and Calaby 1985: 124). Published between 1907 and 1920 in Europe, *Die Aranda* was widely read and stimulated thinking about ‘the primitive’.

The selected time period enables us to compare the works of the missionaries with others who were working in Central Australia in the early twentieth century. I contrast the attitudes and ideologies of language which were held by the missionaries with those of their contemporaries. Their German nationality can be contrasted with that of the British and British-Australian anthropologists. Their Protestantism can be contrasted with that of German Catholics of their time. Among Lutherans, their views can be contrasted with those of other German missions such as the Basel mission and the Moravians. Among Germans their Christian humanist views and training in text-based philology can be
contrasted with that of those trained in the latter half of the nineteenth century in positivist approaches to research. As close observers of Aboriginal societies and languages their work can be contrasted with that of the linguists of the metropole who didn’t engage in field research.

While sharing some characteristics, the Hermannsburg and Neuendettelsau missions were also distinct and I will also compare and contrast their approaches to language as revealed in the work of the first and second generations of Lutheran missionaries in Central Australia.

The terminal date of 1910 for this thesis is the year that Carl Strehlow completed the last volumes of *Die Aranda*.

### 1.4 Previous research

The Lutheran missionaries Christian Gottlob Teichelmann (1807-1888) and Clamor Wilhelm Schürmann (1815-1893) were the first Lutheran missionaries to undertake linguistic work in South Australia (Lockwood 2014). Stockigt (2016) writes about a Lutheran grammatical tradition which started with the Lutheran missionaries in Adelaide and was later extended to Central Australia. Her particular focus is upon grammar and the grammatical traditions that arose in the Australian colonies. For the specific area of Central Australia, some more general histories of Central Australia exist (eg Hartwig, 1965), as well as more specific work on the Hermannsburg missionaries. There is much useful biographical information about the Hermannsburg missionary linguist Carl Strehlow and other missionary linguists of Central Australia, (Scherer 1973; Altmann 1980; Liebermeister 1998) but this provides limited information about the education and training of these missionaries. Kneebone (2005) covers an earlier time period than the
present project (1867-1880), tracing the connections between the Hermannsburg Mission Institute missionaries and the development of comparative philology in Germany in the nineteenth century. She attempts to explain the influence of comparative philology on the linguistic fieldwork of Lutheran missionaries in the late nineteenth century. Kneebone focuses upon the ‘graphization’ of Dieri (Diyari) language and the use of the written language in early mission documents. The Hermannsburg Mission Institute missionaries used the Lepsius orthography (Lepsius, 1981 [1863]) to record the Dieri language. However, Kneebone provides only limited exploration of missionary training, or what the missionaries learned in the Gymnasium (secondary school) and training institute.

A recent relevant work is John Strehlow’s (2011) comprehensive biography of his grandmother Frieda (Keysser) Strehlow, one of the early Hermannsburg missionaries. This includes discussion of the Neuendettelsau Mission Institute and much detailed discussion of the history of the Hermannsburg Mission.

Walter Veit writes with a concern to understand the German Protestant context of the Central Australian missionaries. Veit (2004, 136) finds that, rather than what we might think of today as anthropological subjects, the learning of languages ‘figures prominently in the curricula’ of the mission seminaries (2004, 140). Veit (1994, 79) discusses ‘the development of Carl Strehlow from missionary to ethnologist’, a progression in Strehlow’s career or status that is also implied in the title of Anna Kenny’s (2013) chapter ‘From Missionary to Frontier Scholar’. In a study of Strehlow as an introduction to his Die Aranda (Kenny 2013) she traces the foundations of the missionary work to JG Herder and ‘Volksgeist’. The German contribution to anthropology in Australia is further explored in the collection of essays edited by Peterson and Kenny (2017). However, there is limited discussion of the specifically linguistic missionary work. Carl Strehlow’s dictionary (2018 [1909]) was edited by Kenny with essays which evaluate the
value of the dictionary for linguistic description (Henderson 2018) and discuss the Mission Orthography (Moore 2018).


1.5 Gaps in the current state of knowledge

There are two main gaps which I am addressing through this thesis. The first of these is the gap in the existing scholarship in historiography of Arandic languages. The present research covers one of the most productive eras of linguistic research in Central Australia and indeed in Australian linguistic history. Stockigt (2016: 445) highlights the problem:

That the early grammatical records of Australian Aboriginal languages have received little scholarly attention outside the discipline of linguistics might be explained by a more general scholarly aversion to anything grammatical. Impressionistically, and perhaps due to Australians’ tendency to monolingualism, undergraduate-level linguistic principles are perceived to be too technical to inform historical investigations of the colonial Australian frontier.

There is no comprehensive account of the linguistic work of the missionaries from the beginning of Hermannsburg Mission to the inception of Structuralist linguistics in Australia from an informed linguistic and historical perspective. There is no study within the history of Australian linguistics which comprehensively treats the language ideologies and descriptive practices of early fieldworkers and the contribution of their language education to their fieldwork and descriptive linguistic research. Some recent grammars of Arandic varieties neglect to mention Strehlow’s work. While Wilkins (1989: 17) refers to grammars of Planert, T.G.H. Strehlow and Yallop, there is no mention of Carl Strehlow’s grammar.
The second type of gap that my research addresses is in language description and documentation of the Arandic languages. Research on these early sources will hopefully close some of the gaps in knowledge of the languages of this group, supplement recent descriptions, suggest further areas of investigation and contribute to further linguistic descriptions of Arandic languages. This thesis will provide the basis for informed interpretation of these works so that the linguistics information they contain can accurately be added to scholarly knowledge of Arandic languages.

2 Outline of this thesis

In agreement with The University of Western Australia Doctor of Philosophy Rules for the content and format of a thesis (39-45) this thesis is presented as a series of papers which are outlined below. The papers are organised into two parts, focussing on the missionaries’ linguistic documents themselves and on the context from which these were produced.

1. The context of Central Australian missionary linguistics

The first five papers of this thesis concern the philosophical and historical context to the missionary linguistics of the late nineteenth and early twentieth centuries.

The Reformation: This paper focuses on a historical development which is of central importance for the study of missionary linguistics, that is, the Protestant Reformation and the establishment of the Lutheran church which resulted from Luther’s break with the Church of Rome in the early sixteenth century. The religious reforms of the Reformation were the catalyst to the codification of vernacular languages and the translation of Christian literature into them. In order to translate the Bible into vernacular German, the Reformers adopted humanist scholarship. Philology arose with the need for the exegesis of biblical sources which were written in Latin, Greek and Hebrew.
Cultural translators: This paper explores the link between missionary linguistics and theology. I claim that ethnography was a subsidiary interest, secondary to the missionaries evangelical translation work. The missionaries sought to codify the language, and to develop a literary language. Philology was extended to Aboriginal languages, to the collection of texts and the making of wordlists and grammars to understand the language. Carl Strehlow’s aims in translation briefly coincided with the need to gain reliable information about the ‘Other’ which was then the concern of German and British scholars, for whom Aranda people represented a primitive society warranting investigation. I highlight the tensions between the missionaries’ evangelical and research goals.

Language ideologies: In this paper I seek evidence of connections between the German philosophy of language and the views and practices of the German Lutheran missionaries in the late nineteenth century. I examine the German philosophy of language which arose during the late eighteenth century through the Lutheran pastor and philosopher J.G. Herder. Views of language arose at this time from the need for translation between languages. I identify key language ideologies: the importance of language and its inseparability from thought, language needing to be observed in actual use as a basis for learning and analysis, and the diversity and complexity of languages. I investigate the degree to which these language ideologies influenced missionary linguistics in the late nineteenth and early twentieth centuries.

The formation of Central Australia missionary linguists: This paper investigates the type and the extent of the missionaries’ training for linguistic tasks in Central Australia. The Reformers, particularly Phillip Melanchthon, reformed German schools and universities. Humanist philology was at the core of the curriculum of the schools and universities and closely aligned with Lutheran theology. Philology was extended from
classical and biblical languages to non-European languages in India, Africa, the Americas and Australia throughout the nineteenth century. I investigate the foundations of philology and its use in missionary training institutes of the nineteenth century. I also investigate the affiliations between missionary linguists and linguistics in Europe.

**Language research:** This paper compares different approaches to linguistic research which were being followed in the early twentieth century. Following the prestige which the natural sciences gained in the late nineteenth century, the humanist emphasis of linguistics gave way to positivism. As comparative philology became more concerned with comparing sound correspondences, other schools of linguistics remained which may be characterised as part of a ‘general linguistics’ which retained an interest in ‘exotic’ languages. These included the Humboldtians who were concerned with typological comparison and missionary linguists who sought to translate the Bible into the languages of the world. While their interest was initially and primarily in translation and missionary activity, the missionaries contributed to linguistic knowledge through their documentation of Central Australian languages.

### 2. Analysis of the linguistic works

The second half of this thesis contains six papers which are concerned with the missionary publications which arise from the history and philosophy of missionary linguistics. The arrangement of these papers replicates the component parts of a grammar: words, grammar, texts and phonetics.

The missionaries first sought key terms to use for their translations. This was a difficult task as many terms from Christianity appeared to have no equivalent in Central Australian Aboriginal languages. The ways in which missionaries developed key terms for bible translation is explored in *The Wanderings of Altjira, Christianity and the*
translation of sacred words in Central Australia which highlights the different ways in which Altjira and Tjukurpa have been translated as key terms in both biblical translation and social evolutionary anthropology. In Altjira, Dreaming and God I discuss the difficulty of attempting to translate the Aranda word Altjira. The adoption of ‘dreaming’ into English is argued to be based upon a mistranslation of Altjira which was based upon the need to find a key term for an anthropological notion.

Developments in the grammatical analysis of Central Australian languages 1890-1910 asks whether there was any development in the understanding of Central Australian grammar through the early missionary period, specifically from Kempe (1891) to Strehlow (1910). Their training in humanist philology and translation gave the Neuendettelsau missionaries a strong grounding in traditional grammar and an advantage over their Hermannsburg predecessors. Their goal of Bible translation and Strehlow’s work on Die Aranda drove the on-going need to refine earlier analyses. I examine a number of grammatical categories in Strehlow’s grammar and texts to show how his grammars went beyond previous work in Aranda.

Legends living in narratives: Texts in the documentation of Central Australian languages 1890-1910 aims to provide an interpretation of the Die Aranda texts. As they were recorded before the advent of modern recording devices, they were dictated and handwritten. They were edited to form literary documents which differ significantly from spoken discourse, but they nonetheless form a rich source of information about Aranda.

Finally, two papers concern orthography:

Uniform Orthographies in the linguistic landscape of Central Australia explains ‘uniform orthographies’ and shows how they were used to record Australian languages from the 1830s, half a century before the availability of the International Phonetic Alphabet.
The Mission Orthography in Carl Strehlow’s Dictionary discusses the Hermannsburg Mission Orthography as a specific uniform orthography for the Aranda language, which was used by the missionaries as a means of written communication for a century. It looks in detail at the representation of the sounds of Aranda.

References


Mathews, R. H. 1907. The Arran’da Language, Central Australia. Reprinted from The proceedings of the American Philosophical Society., XLVI.


Fellows, Flinders University, 77-100.


A timeline of language research and translations in Central Australia 1877-1920

1877
8th June. Establishment of a mission amongst Arrarnta (Aranda) people at Ntaria by missionaries from Hermannsburg in Lower Saxony in Germany. The mission is called ‘Hermannsburg’. An earlier mission was founded in the Coopers Creek region in 1866-67 and named Hermannsburg, and then renamed ‘Bethesda’.

1891
Hermann Kempe publishes a grammar and a worship book. The Hermannsburg missionaries leave.


1894
Carl Strehlow leaves Bethesda and arrives at Hermannsburg Northern Territory.

1897

1900
Otto Siebert writes a letter (Nobbs 2005), calling for research into Aboriginal languages and cultures, and sends it to the mission board in Adelaide.

1904
Carl Strehlow revises the Aranda worship book, replacing the loanwords that were in Kempe’s version.

**c. 1906**

Carl Strehlow begins working with Luritja speakers such as Talku. Moses Tjalkabota involved.

**1907**

Moritz von Leonhardi publishes an article in *Globus* on the basis of his correspondence with Strehlow.


Leonhardi indicates that he will publish more texts, which become:


**1908**

Carl Strehlow writes an article in *Zeitschrift für Ethnologie*, critical of Planert’s Aranda grammar. Strehlow indicates that he intends to publish his own Aranda grammar.


**1909**

Carl Strehlow dictionary completed Aranda-German-Loritja-Dieri-Narrinjeri. English translations were made in the late 1940s by Phillip Scherer and by G. Liebchen in the 1980s, and Kenny (2018).

**1910**

Carl Strehlow’s unpublished ‘Grammatik’, a grammar of Aranda and Loritja. Ludwig Kaibel produces a handwritten copy of the Strehlow’s grammar.

**1910**

The Strehlow family travel to Europe and are away from Hermannsburg 1910-1912. Leonhardi
dies.

1913-1919.

Carl Strehlow translates the remainder of the Aranda New Testament. Four Gospels are published in 1928.

1920

The remaining instalments of Die Aranda are published in Frankfurt.

1922

Carl Strehlow travels south to seek medical assistance and dies at Horseshoe Bend.
The Reformation, Lutheran tradition and missionary linguistics

David Moore

Introduction

The Lutheran Reformation of the sixteenth century was the main influence in shaping the philosophy and practice of missions in Central Australia in the late nineteenth century. Martin Luther (1483-1546) translated the Bible into German, publishing the New Testament in 1522 and the complete Bible in 1534. The Reformers taught that the Bible alone was authoritative, according to the principle of Sola Scriptura, that is, as the primary source of Christian truth. Luther and the Reformers moved to a literal reading of the Bible, rather than a figurative reading. This required an accurate reading of the Bible in Hebrew and Greek, the source languages of the Old and New Testaments. Principles of translation and exegesis developed for the translation and interpretation of Biblical texts.

The Reformers established classical philology. Humanist scholars Johann Reuchlin (1455-1522) and Desiderius Erasmus (1466-1536) facilitated the understanding of the ancient languages in Germany. Bible translators were able to use grammatical aids such as Reuchlin’s Greek grammar. Church services were held in German rather than Latin. The resulting increase in levels of publication and literacy required a standard literary German and extensive research into the spoken German language.

The Reformation shaped the practices of churches, missions and schools for the next five hundred years. It was through Lutheran churches and schools that the influence of the Reformation was brought to remote regions, including the first linguistic work in the Indigenous languages of South Australia and the Northern Territory. This paper explores the influence of Martin Luther and the Lutheran Reformation on the linguistic practices of the missionaries in Central Australia who undertook the first Bible translations into Australian Aboriginal languages. A worship and catechism book, the Galtjintana-Pepa by Adolf Hermann Kempe (1844-1928) was published in 1891. Carl F. T. Strehlow (1871-1922) revised Kempe’s worship book in 1904 and translated the New Testament into...
Aranda (Arrarnta, Arrernte), of which only the gospels were published (British and Foreign Bible Society, 1928). From 1892 to 1894 Strehlow had been stationed at Killalpannina where he collaborated with J.G. Reuther on the translation of the Dieri New Testament (Reuther and Strehlow 1897) and also worked on translation with Otto Siebert.

Luther’s Bible

Luther’s translation from the original languages into German was a landmark work. The New Testament or Septembertestament as it came to be known, was completed in 1522 and the Old Testament and complete Bible in 1534. The Luther Bible has been more influential than any other translation for a thousand years and contains the first translation of the New Testament from Greek in any of the Germanic countries (Bluhm 1966:327). Other Bible translations of the sixteenth century in Protestant countries are dependent upon the Luther Bible, and it was emulated by Catholic translations. Despite a major revision of Luther’s Bible in 1984, many renderings are almost unchanged nearly five centuries later. The first published translations of the Bible into Australian Aboriginal languages Dieri (1897) and Aranda (1928) were translated by missionaries who read the Luther Bible.

Luther’s principles of translation can be seen in his Sendbrief vom Dolmetschen (An Open Letter on Translating) of 1530. According to Nida (1964:29) Luther had two concerns, firstly that the people might fully understand the language and secondly that the theological implications of the Bible should be perfectly clear. Within a year he followed with a companion pamphlet Defense of the Translation of the Psalms in which he revealed difficulties he encountered in translating the Psalms and bridging the gulf between the Hebrew and German languages.

As Luther (1530:637) stated, ‘I wanted to speak German, not Latin or Greek, since I had undertaken to speak German in the translation’. His aim was to find the original meaning of the text and to reproduce the meaning in the best German style that was possible, ‘When [the translator] has the German words that serve the purpose, let him dismiss the Hebrew words and freely express the sense in the best German that he is capable of using’. Luther was prepared to adapt the original Hebrew and Greek in order to create idiomatic German. It was as though the Bible had been written in German in the first
place. The translation would not seem like a translation, it would be like an original (Bluhm 1966:328).

**Selection of material to be translated**

Most important for Luther was the translation of the Bible: ‘There is no book on earth written more lucidly than Holy Scripture. Compared with all other books, it is like the sun compared with artificial light’ (Luther, WA VIII, 236, 11.9,10, cited in Haile, 1976: 823). Second in importance was the Small Catechism. In keeping with Luther’s priorities these two texts were also the most significant for the nineteenth century Lutheran missionaries, the ‘twin texts which were to be read, studied and applied to real life situations on a daily basis’ (Kneebone, 2005: 394). The catechism was thought of as the Bible in miniature. It contained the Ten Commandments, the Lord’s Prayer, the summary of the Christian faith in the Creed, and the sacraments, with explanations; and in Central Australia the translation of the catechism was invariably supplemented by translations of some of the psalms, daily prayers and selected passages from the Bible which didn’t appear in other published works. Making such selections was also informed by Luther, for whom particular books of the Bible were of greater significance than others; he spent more time working on those books and kept refining his translation (Koelpin, 2001: 231). He judged and ranked the relative worth of books. Romans and Galatians were significant for Luther’s key doctrine of justification by faith. In his ‘Prefaces to the New Testament’ (1546) Luther said that the gospel of John and the epistles of Paul as well as 1 Peter, rank as ‘the true kernel and marrow of all the books’ (LW 35: 361,362).

The translation of the Bible and the Small Catechism were the highest translation priorities for the Central Australian missionaries. But probably even more immediate for them was to be able to preach in the vernacular. The New Testament translations didn’t appear for ten to twenty years after the missionaries started working on them, and, by contrast with the slowness of the translation work, the missionaries were often preaching in vernacular languages within months of arriving in the mission field. The ultimate goal was the sermon.
Learning the vernacular and linguistic research

An adequate knowledge of the source and receptor languages was a *sine qua non* for the vernacularisation of the Bible. Luther was concerned to use actual idioms in use in contemporary German rather than calquing the syntax and semantics of the Latin original.

Luther had clear views about language acquisition as ‘Every one learns German or other languages much better from talking at home, at the market, or in the church, than from books. Printed words are dead, spoken words are living’ (cited by Painter 1889:158).

One of the distinctive characteristics of later Lutheran Mission societies of the nineteenth century was the policy of learning local languages. There was also a difference in mission societies (Harms 2003:29), that unlike the Moravians the Hermannsburg and Neuendettelsau missionaries worked in Aboriginal languages (Lockwood 2014; Kneebone 2005:321). Not only was there a contrast with other missions, but the mission attitude to language strongly contrasted with that of contemporary anthropologists who worked in Central Australia (Moore 2016).

Luther engaged in linguistic fieldwork

‘We ask the mother in the home, the children on the street, the common man in the market place, how this is done. Their lips we must watch to see how they speak, and then we must translate accordingly. Then they will understand us and notice that we are talking German with them’ (Luther, WA 30 II, 637).

Luther’s search for key terms was painstaking. He visited a butcher to learn about the names for the internal organs of sheep and researched the names of jewels and gems to find the German terms to be used in translation. Sometimes Luther admitted that he had not found what he wanted: ‘We just don’t have a German word’ (Koelpin, 2001: 7). At other times he ‘felt they had found a perfect expression, but it seemed too daring to place into the text’.

It has often happened that for three or four weeks we have searched and inquired about a single word, and sometimes we have not found it even then. In translating the book of Job, Master Phillip, Aurogallus and I have taken such pains that we have sometimes scarcely translated three lines in four days. (LW 35: 188)
Luther used the widely-understood German of the Saxon court to make a Bible that would be accessible to all Germans (Clyne 1995:28) and popularized that dialect at a time when Germans could hardly understand each other because of the number of German regional dialects. Luther (WA, Table Talk No. 2785b) claimed that ‘the language which I use is common, it is not merely provincial. Therefore many people from upper and lower Germany can understand me.’ The Saxon dialect was adopted as the High German (hochdeutsch) literary standard of Germany because of Luther’s translation of the Bible.

Less well known is the adaptation of Luther’s Bible for local dialects including Low German dialects and its use in mission work. The Reformation had established the principle of using the vernacular in Bible translation. After the translation of Luther’s Bible, Johannes Bugenhagen, a member of Luther’s translation committee, translated each part of the Luther Bible into Low German. Harms (2008:88) mentions that the Bugenhagen translation was used by Hermannsburg mission founder Louis Harms for devotions and pastoral work. Siebert saw the Bible as a German national book with ‘individual character’ (Nobbs 2005:37), as it had become through the effort of Luther. It would also become a Dieri book through the efforts of the missionaries. The intensive learning of Dieri and Aranda in the late nineteenth century was an extension of the vernacularisation and translation process of the Reformation.

The significance of the source languages

Although there had been Bible translations into German before the Luther Bible, Luther and his translations were made from Hebrew and Greek, rather than the Latin of the Vulgate. Luther read the Greek New Testament of Erasmus (1516, revised 1519) and the Old Testament was translated from a version of the Hebrew which appeared in 1494 (Lauer 1915:15). The original languages were virtually unknown in Europe as Latin maintained its dominance throughout the Middle Ages. The fall of Constantinople in 1453 led to the exodus of many Greek scholars to countries in the west with the result that there was a revival in Greek scholarship, an event which Luther saw as providential. Luther claimed that Hebrew and Greek were sacred because they were the languages which God had chosen to convey the Gospel. A knowledge of the ancient languages was valuable for understanding the original biblical sources and for theological disputation.
Luther didn’t translate the Bible on his own, but made use of a team of specialists in the ancient languages and translation. These included Johann Bugenhagen (1485-1558) and Phillip Melanchthon (1497-1560) who wrote his Greek Grammar at the age of twenty one. Matthew Aurogallus (1490-1543) was called to become professor of Hebrew at the University of Wittenberg in 1521. His Hebrew Grammar appeared in 1525 and 1529 (Plass 1959:1571). Other linguists and translators were Caspar Cruciger (Creutziger) (1504-1548), George Rörer (1492-1557) and Justus Jonas (1493-1555).

At the beginning of the Reformation, Latin was the language of the cloister and the university and Hebrew and Greek were learned through Latin. To a large extent, Luther and the other Reformers had memorised the Scripture in Latin and were thoroughly familiar with it (Bluhm 1951:252). The Latin Bible was in force for a thousand years and had great authority in medieval society and influenced their translations. Luther wasn’t hostile to the Vulgate (Lauer 1915:18), in fact he made extensive use of it, even when the Vulgate Bible was superseded by the German Bible. Although Luther translated the Old Testament from Hebrew, he often retained Latin forms, especially where Scriptural passages had been memorized and were already known (Lauer 1915:17; Bluhm 1951). An example of this is Luther's Bettbuchlein, which as a prayer book was more susceptible to traditional usages (Bluhm 1952:200). In Luther’s view the learning of Latin was essential and the language remained important even after the emergence of the European vernaculars. About one third of Luther’s writings were in Latin (Plass 1958: xv) as were the writings of the other Reformers, so an understanding of Latin was required to read their works. Latin Schools continued to dominate German education after the time of Luther and formed an essential part of the education of the missionaries. Latin words would be adopted as key terms in the Aranda translation.

Luther regarded Hebrew, the original language of the Old Testament, as the vehicle the Holy Spirit had chosen to convey scriptural truths (WA 54: 39). Luther delighted in the simplicity and clarity of the language.

‘The Hebrew language is the best and most copious in root words; it is a pure language and does not go begging. It has a colour of its own. Not so the Greek, Latin and German languages, all of which go begging and have many compounds as the German mitlaufen, fortlaufen, eilend laufen, weglauen, etc.’ (Luther, WA Table Talk W-T 2, No. 2782a).

---

2 Luther was fluent in Latin and wrote in the language. He could translate from Latin to German and from German to Latin whereas his control of Hebrew and Greek was likely to have been more limited.
Luther urged others to learn Hebrew and sought a teacher for Hebrew at the University of Wittenberg (Lauer 1915:16). He studied Hebrew before he studied Greek, making use of Reuchlin’s *Rudimentia* (1506), a Hebrew-Latin grammar and lexicon.

The Reformers learned Classical Greek as the original language of the New Testament. Luther learned through Erasmus’ Greek New Testament (1516), and through the help of scholars such as John Lang and Phillip Melanchthon. His translation of the New Testament into German used the 1519 edition.

The importance of the ancient languages for higher education was apparent in the nineteenth century. By the nineteenth century Lutheran missions were emphasising the study of Greek and Hebrew. Their policy was not shared by, for example, the Moravian missions (Lockwood 2014:67). When the Hermannsburg missionaries required theological key terms they often resorted to the use of words from Latin and Greek. Latin, Greek and Hebrew were the most important languages of the Hermannsburg (Harms 2008:25) and Neuendettelsau (Strehlow 2011:208) mission training institutes, although at Neuendettelsau Hebrew was only studied by those who had a grounding in the other ancient languages.

**The meaning of 'literal sense'**

What does 'literal sense' mean for Luther when it refers to the sense or meaning of a text? A misconception of the time was that the Bible couldn’t be competently translated from Latin into German and that the Bible was very difficult for lay people to understand (Koelpin 2001: 10). In these contexts, it does not mean an approach of 'formal equivalence', opposed to the 'functional equivalence' approach which is currently in favour with translators (de Waard and Nida 1986: 36). The ‘literal sense of scripture’ stands in contrast to a figurative sense, not a free or idiomatic sense. Luther had been taught at university that a text could be interpreted according to any of four senses: literally, allegorically, tropologically or anagogically. Since it was inspired by the Holy Spirit, Luther believed that the Bible was relevant to all humans and could easily be understood. Therefore a non-figurative interpretation of the Bible was required: ‘The reader should devote his first effort to searching for what is called the literal sense. It alone is the entire substance of faith and Christian theology’, (LW 14:560). That means that ordinary people, not only the learned or religious, could understand its meaning. Obscure verses in
Scripture must be translated so that their interpretation was clearly understood. Luther changed metaphorical expressions to literal expressions when German, the receptor language, lacked a Hebrew idiom as will be shown with his translation of the Psalms (below).

**Luther on translation**

Nida discusses the translation principles which Luther followed which related to the grammar and differences in language structure between German and the ancient languages. Luther ‘carefully and systematically worked out the implications of his principles of translation’ (Nida 1974:15). Nida indicates shifts of word order, the employment of modal auxiliaries and ‘the introduction of connectives when these were required’. He further mentions ‘suppression of Greek or Hebrew terms which had no acceptable equivalent in German’ and the re-casting of constructions to make them more idiomatic and the use of phrases where necessary to translate single words in the original.

Luther continually revised his translations and sought more idiomatic ways of translating the source texts. This required inventiveness and the boldness to make changes not only in the vocabulary but to make grammatical changes to the language of the source version. Latin was the medium through which Luther’s Hebrew had been learned. The Reformers were not able to shake off some of the established uses such as the use of Latin Dominus for Hebrew Jahweh (Bluhm 1951:253). Luther’s Psalms for example (Bluhm 1951:255) are a mixture of ‘painfully literal and idiomatic’ expressions and Bluhm sees a range of translation from ‘utter literalism to superb freedom’.

As his Psalms were revised the most extensively, it is instructive to have a closer look at how Luther handled, for example, the well-known 23rd Psalm (in English ‘The Lord is my Shepherd’). The earliest drafts were made in 1523 and the final version was published in 1531 and shows the transition from a literal document to an idiomatic translation. The third verse is rendered in Latin as semitas iustitiae ‘paths of righteousness’ (Bluhm 1951:255):

בְּמַעְגְּלֵי־צֶ֝֗דֶק

(Hebrew Old Testament)
Luther changed it to *auf rechtem Pfad*, rather than the more literal *Pfad der Gerechtigkeit*. The most recent version of the Luther Bible (1984) follows the same pattern, but changes a word to *rechter Straße*. The first and the fourth verses remained unchanged from the printer’s copy to the last edition (Bluhm 1951:252). Except for the orthography, the first verse of the psalm is unchanged in the 1984 version of the Luther Bible. This shows the durability of Luther’s translation. Luther changed the literalisms in the first version of his Psalms translation and moved away from the Latin. In verse two he changes *in loco pascuae* ‘in places of pasture’ to *ynn der wonug des grasses*. Luther alone employs what might be termed the principle of conversion from nominal to adjectival phrases ‘for the sake of better and more idiomatic German’ (Bluhm 1966:333). Probably under the influence of the Hebrew (Bluhm 1951:252) Luther changed the verbal *regit* ‘rules’ or ‘pastures’ (*pascit*) to the noun ‘shepherd’ (German: *Hirte*). The Central Australian missionaries used *tnainarinja* ‘shepherd’ for the Aranda translation, which is apparently derived from *tnainama* ‘to graze, to pasture, to watch’ (Kempe 1891:51).

Nida (1974:28) shows that Luther rejected previous literal translations to translate Greek *κεχαριτωμένη* (favoured one) in Luke 1:28. The Greek word is the perfect middle participle and can be translated into English as ‘to be gracious, favourable’. Luther rejected the Vulgate Latin *plena gratiae* ‘full of grace’ and a German calque *voll Gnaden* and replaced it with ‘gracious one’ (*holdselige*). On the basis of this verse, the Medieval Church had claimed that Mary could dispense grace. Luther’s term removed the grounds for Mariolatry by turning a statement about Mary into a simple greeting (LW 35:191). Luther also added words to make the meaning of his translations clearer. To support the doctrine of justification by faith he added the word ‘alone’ (*allein*) to the translation of Romans 3:28 so that it read ‘through faith alone’ (*allein durch den Glauben*). Here he was concerned to put contemporary German usage ahead of the criticisms of his opponents.

**Missionary translations**

The impulse for missionaries to create vernacular translations can be traced directly to Luther. As Kneebone (2005:75) expresses it,
‘the most important reason for the choice of an indigenous language as the medium for mission work goes back to Luther’s conviction that the mother tongue was the most appropriate for communicating das Eine was noth thut, that which was essential in spiritual terms, namely the way of salvation through Christ’.

Luther’s data-gathering involved finding the way that people really spoke and attempting to translate the Bible into idiomatic German. With language learning and the spread of the ancient languages in the sixteenth century, came awareness of the difference in language structures and the recognition that literal translation does not effectively communicate the meaning from one language to another. An insight from Schwarz (1945:296) is that Hebrew idioms, in particular, were wholly at variance with Latin and Greek ones and had to be accepted as characteristic of that language. The research that was done by Luther with the learning of idiomatic expressions and the attempt to reflect the authentic use of the language is evident in the work of missionary linguists Kempe, Reuther, Strehlow and Siebert. They appear to have been aware of linguistic relativity, that languages have different grammatical and semantic systems. Siebert sought to be volkstümlich, as Kneebone (2005:372) translates ‘appropriate to the people’. Siebert compared the authentic spoken language of Dieri with ‘Kitchen Dieri’, the language spoken around the mission precinct (Nobbs 2005; Kneebone 2005:373). In order to translate, the missionaries created linguistic resources. Thus Kempe created an Aranda grammar and wordlist (1891), and Strehlow a wordlist containing 15,000 words from the Aranda, Loritja and Dieri languages (1909). This volume contains the most entries of any Aboriginal language dictionary in Australia -a truly remarkable achievement.

Finding key terms

Bible translation requires the development of key terms. When there was a lack of key terms the missionaries had to devise them, as Luther had done. Luther invented terms and used existing words in novel ways. He continually searched for better terms to use in translation, and replaced earlier terms with newly-devised terms, as for example with his Galatians 1:5 translation:

\[\alphaim\nu\acute{a}s\;\tau\omicron\nu\;\alphai\omicron\nu\omicron\nu\nu\;\text{(unto the ages of ages, Greek New Testament)}\]

\[\text{ewigke}t\;\text{zu}\;\text{ewigke}t\;\text{(from eternity to eternity, Luther)}\]
For unfamiliar referents, the missionaries substituted the familiar. In Psalm 29:6, Kempe used *rira* 'plains kangaroo' for Hebrew רְאֵמִים, an unfamiliar creature usually translated into English as ‘a young wild ox’. There had already been numerous loanwords into Aranda from English and German, referring to familiar objects. These were assimilated to Aranda pronunciation and written according to the Mission orthography for Aranda. For example:

Kelja ‘cup’ from German Kelch (Mark 10:38).

Tjukatjuka ‘chicken’, from ‘chook’ Tjukutjuku uria chicken-male ‘a rooster’ (Mark 14:72)

The missionaries noticed that there was a lack of terminology in the field of religion, reflecting the incommensurability between Indigenous and European societies. In the opinion of the missionary Fliedl, ‘the main difficulty of all these languages lies in the lack of abstract, intellectual and spiritual terms’ (Kneebone 2005:379). An immediate solution was to borrow terms from the source languages. In his earlier work the Galtjintana-Pepa (1891), Kempe had used theological terms from the ancient biblical languages as local Indigenous terms were not yet available. Strehlow (1904) made extensive revisions to the earlier work of Kempe and replaced foreign terms with terms developed from Aranda:

<table>
<thead>
<tr>
<th>Kempe 1891</th>
<th>Translation</th>
<th>Strehlow 1904</th>
<th>Strehlow 1909</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sancta</td>
<td>holy</td>
<td>Alknaltura</td>
<td>rein, klar (Wasser), hell pure, clear (water), light</td>
</tr>
<tr>
<td>Gratia</td>
<td>Grace</td>
<td>Kankinja</td>
<td>freundlich, liebend friendly, loving</td>
</tr>
<tr>
<td>Jehowa, kyria</td>
<td>Lord</td>
<td>Inkata</td>
<td>Häuptling, Herr chief, elder</td>
</tr>
</tbody>
</table>

Luther was aware that words are polysemous, for example Greek πνεῦμα may be translated as either ‘wind’ or ‘spirit’ in John 3:8. Plass (1959:95) explains, ‘In his exposition of these words Luther points out that both translations have found favour. The context, says he, must determine the matter, thus proving his contention that a knowledge

---

3 It must be remembered that many of the loanwords into Aboriginal language translations had been loans into European languages at an earlier stage in history, for example *spiritus* was borrowed into English from Latin.
of words as such is not enough’. The context would have to be examined and understood. A translation choice would have to be made about which word would be used in the receptor language. The missionaries used the Aranda word for wind wurinja to translate ‘spirit’ and alknaltara ‘clear, clean’ in wurinja alknaltara ‘Holy Spirit’.

The key term ‘church’ shows the challenge in finding key terms. The term wolla (wurle) was used for the congregation in Aranda translations, as noted by Austin-Broos (2010:23). Carl Strehlow (1909) defined wolla as ‘Haufe’, or ‘Menge’, a great many or a crowd. The term derived from Luther’s definition of the church as ‘gathering’ or ‘assembly’. Greek ἐκκλησία had a secular meaning of a meeting of a city-state and has that meaning in for example, Acts 19:32. Luther explained:

Thus the word “church” (Kirche) really means nothing else than a common assembly. Etymologically it is not German, but Greek (as is also the word ecclesia) for in their own language the Greeks still call it a kyria, as it is called curia in Latin. (Luther, WA 30, I, 189).

In Colossians 1:18-20 Luther used the word Gemeinde, ‘he is the head of the body the church’. In Aranda, wolla could be used to mean ‘a crowd of people’. For example from Carl Strehlow’s Luke’s Gospel Chapter 1:10:
Wolla ntjabera rellintjaraka

This is in keeping with Luther Bible’s ‘und die ganze Menge des Volkes, ‘the whole multitude of the people’.

There are two of types of word formation as TGH Strehlow (1944:70) recognised and employed in his 1956 Aranda New Testament translation. One method is that of zero derivation to use words with different functions to their normal use as though they were members of a different word class, in TGH Strehlow’s words ‘using adjectives as abstract nouns’:

<table>
<thead>
<tr>
<th>Word</th>
<th>Strehlow (1909)</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Konna</td>
<td>schlecht</td>
<td>Sin</td>
</tr>
<tr>
<td></td>
<td>bad</td>
<td></td>
</tr>
<tr>
<td>Nguanga</td>
<td>freundlich, ruhig, zahm</td>
<td>Peace</td>
</tr>
<tr>
<td></td>
<td>friendly, calm, tame</td>
<td></td>
</tr>
</tbody>
</table>

Later translations replace wurinja with inka, a human spirit.
Another method was to derive nouns from verbs by a process of nominalisation, a process which the missionaries were aware of through their studies of Aboriginal languages (Kneebone 2005:380). This is clearly seen with section headings which typically require that a noun in the source language be translated by a noun. In the Old Testament translation for example,

Kunilinja, The Fall (Genesis 3) from kunilama 'to do wrong'.

Raratalatunja Sodomaka, The Punishment of Sodom (Genesis 19) from the verb 'raratalatuma', ‘to punish’.

Turninjamea are the commandments (Exodus 20). Turnama is ‘to command’.

Nominalisations appear in the 1891 Galtjintana-Pepa worship book and grammar (1891) although Kempe didn’t explore the process of deriving nouns from verbs in his grammar.

The adoption of ‘Altjira’ for ‘God’ is surprising. The word is difficult to translate into English. The use of Altjira is surprising because the missionaries at Killalpannina used a loanword ‘Godaia’. Altjira was a daring innovation. As there was no term for anything approximating the Christian God, the missionaries could be accused of syncretism, by borrowing terms from traditional religion. A syntactic shift was made. Altjira could now occur with the grammatical Agent marker and appear as the Agent or Subject of a transitive clause as Altjirala. Although terms could be derived through the processes described above its doubtful as to whether they were easily understood as their use involved the grammatical and semantic extension of words beyond the natural ways in which they were used in the Aranda language.

**Idioms and figures**

---

5 The controversy over the meaning and use of the word Altjira is explored in detail in Moore (2016).

6 Many of the original terms have become established in church usage over the generations and retained in the 1997 Altjirraka Angkatja translation.
The lack of common idioms and figures of speech between the source and the Aboriginal receptor languages was one of the greatest difficulties faced by the missionary translators as literal translations of idioms and figures of speech hardly ever mean the same in another language (Beekman and Callow 1974:30). Idioms are lexically complex, that is, they have more than one ‘word’ for what is conventionally thought of as a word. The idiom is not compositional or readily understood from the meanings of its component parts, but consist of a ‘minimal semantic constituent’ (Cruse 986:37).

Nida (1974: 15) found that Luther made shifts of metaphors to non-metaphors and vice versa. Koelpin (2001: 9) has analysed Luther’s translation of Psalm 63:5. A literal translation of the Hebrew would read, ‘Let my soul be filled with lard and fat, so that my mouth may make praise with joyful lips’. The sense was lost by a literal transfer, because the expression ‘lard and fat’ was clearly not a metaphor for ‘joy’ in German, as it was in Hebrew. The language would need to be made non-figurative in German. A literal translation in German would be meaningless or it would result in an incorrect understanding of the text. So Luther re-worked the phrase in Luther’s Psalter revisions of 1531 and 1545 and translated it as,

"It would be my heart's joy and gladness, if I were to praise thee with joyful lips". (LW 35:212, footnote 14).

Kneebone (2005:373) discusses Siebert’s changes to Psalm 34:12-17 from the earlier version by Homann and Koch, although she concedes that ‘it must be a subject of future research whether Siebert’s new approach actually produced more effective translations’. Despite their understanding of Aboriginal societies, it is evident that the missionaries did not translate idioms and figures so that they were meaningful in the receptor languages. For example, in Mark 10:38 the ‘cup’ metaphor has not been translated into a more meaningful expression. The recent Arrarnta (Aranda) translation (Altjirraka Angkatja 1997) has, ‘Are you two able to suffer with me?’ This leaves out the ‘cup’ image altogether. While the missionaries could handle the translation of terms, particularly for those of unfamiliar physical objects, they were far less adept at handling idioms and figures of speech. According to Stolt (2014:397) we are dealing with biblicisms. Luther stood in an ancient tradition of ‘sacral narrative’ and this was also true for the missionary translators. Biblicisms were fixed expressions which constrained the degree to which idiomatic translation was possible. Meaning-based approaches to the translation of idioms
and figures were not adopted widely until the second half of the twentieth century and very few translators of any languages were prepared to depart from the formal structures of the source languages.

**Conclusion**

The Reformation had a profound impact on the development of German literature and the German language through the translation of the Luther Bible. As with so many other fields, Luther’s linguistic research, fieldwork and translation theory anticipated linguistics of the modern world aimed at the vernacularisation of the Scriptures. Through the training of candidates for the Hermannsburg and Neuendettelsau missions, the nineteenth century missionaries studied subjects which Luther had recommended, with a focus upon the ancient languages, the Bible and an approved selection of classical authors, a curriculum that was distinctive and unlike that of other Australian missionaries. The Hermannsburg missionaries translated the Luther Bible and the Small Catechism into the languages of Central Australia as a priority. In translating the Bible their sources were the Hebrew Old Testament, the Greek New Testament and the Luther Bible. They also generated wordlists and grammars to assist the translation work. Further research needs to be done to understand how translation into Aboriginal languages occurred. However, it seems that over the decades of missionary translation that the missionaries who started with literal translations were able to replace foreign terms with local terms and work towards more idiomatic translations. They researched the languages and compiled grammars and wordlists, linguistic resources similar to those of the humanists and those of Luther’s committee of specialist linguists and translators at Wittenberg. The comparison between Kempe’s Galtjintana-Pepa (1891) and Strehlow (1904) reveals a growing awareness of the language and the development of theological terminology. As with Luther’s translations, they were constrained by biblicisms and established usages in the source languages. It was a time-consuming process to find theological key terms and they struggled to develop meaningful translations in Aboriginal languages. Many of the theological key terms they found or created have become established in the Lutheran congregations of Central Australia, hallowed by time and usage to become part of the Aranda church language. Despite their limitations, the early Lutheran Central Australian translators laid the foundation for the vernacular Bible translations of the present.
References


Bluhm, Heinz. (1943), ‘Recent American research on Luther’s German Bible’. Germanic Rev. 18, 161-171.


Stolt, Birgit. ‘Luther's translation of the Bible.’ *Lutheran Quarterly*. Volume XXVIII, Number 4, Winter 2014, pages 373-400


INDIGENOUS CULTURES IN TRANSLATION

David Moore and Victoria Ríos Castaño

Introduction

From the sheer volume of work conducted on the broad topic of indigenous cultures that have been interpreted worldwide throughout the centuries, this chapter focuses on the translation of indigenous cultures that was carried out in two separate places and in distinct colonial periods—sixteenth-century Mexico (New Spain) and nineteenth-century and early twentieth-century Central Australia—, thus offering an analysis of two case studies that can contribute to drawing general conclusions applicable to other cases of indigenous cultures in translation. Disparate as the two cases may first seem, this chapter endeavours to demonstrate that the learning of indigenous languages and the understanding, study, codification, and deployment of material on indigenous cultures in both areas emerge as strikingly similar. In order to support this claim, the study offers two sections; the first focusing on the work of the Franciscan missionary Fray Bernardino de Sahagún in colonial Mexico, and the second on Carl Strehlow and his colleagues in late nineteenth and early twentieth-century Central Australia. In both sections, special emphasis is given to the missionaries’ education, to the influence of literary models, and to the ethnographic-like works that were created for their proselytising objectives.

One of the main contentions of this chapter is that naming Sahagún and Strehlow missionary ethnographers, or using a similar label like colonial anthropologists, entails miscalculating the pitfalls that such denominations incur for both colonial studies and the disciplines of ethnography and anthropology, where the notion of the ‘missionary
ethnographer’ is common. A better understanding of the nature of Sahagún’s and Strehlow’s colonial work (and that of others like them) should, we argue, focus more on the extra-textual constraints under which their texts were produced, namely, their patrons, ideologies and religious beliefs, and target audiences, and acknowledge that the texts were mostly intended as readings for members within the same missionary order. It should be also recognised that these missionaries collected information on indigenous peoples in order to destroy, in the Franciscans’ case, and replace, in the Lutherans’ case, indigenous religions and, therefore, a great part of these indigenous cultures, intentions that are at odds with the dissemination of knowledge per se. This chapter coincides with scholars’ interest in providing a contemporary understanding of what these missionaries did as they translated the indigenous languages and cultures, but it does so by suggesting a new label, that of cultural translators, which incurs fewer problems of interpretation without compromising the authentic nature of their endeavours and works.

In New Spain, soon after the fall of the Aztec or Nahua empire in 1521, missionaries of the Franciscan Order like Fray Andrés de Olmos, Fray Toribio de Benavente, Motolinía, and Fray Bernardino de Sahagún set out to learn and record information on the Nahuatl language (the lingua franca of the conquered Aztec Empire) and on the Nahuas’ world so as to spread the Christian faith more effectively among those newly and about to be converted. Translation came about not only as a linguistic and cultural transfer of European religious texts into Nahuatl but also as the interpretation and codification of the Nahuatl culture into European written formats. For their part, in Central Australia, the learning of aboriginal languages like Aranda (so represented in the mission orthography, but Arrarnta or Arrernte in current orthographies), Dieri and Luritja and the translation of religious works into these languages developed as a result of intense interest in nineteenth-century Germany in philology and its engagement by missionary societies in
their goal of evangelisation through translation. The first missionaries were sent by the Hermannsburg mission in Lower Saxony, Germany, arriving in Central Australia 1877. They were succeeded by missionaries from Neuendettelsau near Nürnberg with the arrival of Carl Strehlow (1871-1922) at Hermannsburg Mission in Central Australia in 1894. The literary interests of the Neuendettelsau Mission Institute were similar to those of the sixteenth-century Lutheran Reformers, which they aimed to revive: the Bible, Catechism and Lutheran Confessions. In addition, they shared the Humanist interest in classical texts, particularly those which were understood to prefigure or foreshadow Christianity. Their immediate goals were to find key theological terms which could be used for preaching and Bible translation. As they came to better understand indigenous societies, they began to collect and exchange information about those societies. Their competence in language facilitated this process.

**Critical Issues and Topics**

Interestingly, scholarly work tends to label the missionaries involved in translation tasks, and more specifically on the codification of cultural material, as ‘pioneering’ or ‘colonial ethnographers.’ As regards New Spain, Mexican historian and philologist Ángel María Garibay Kintana was first to dedicate in his *Historia de la literatura náhuatl* (1953-4) a whole chapter, entitled ‘misioneros etnógrafos’ or ‘missionary ethnographers,’ to the study of those works attributed to friars like Olmos, Motolinía and Sahagún. In his view, they represented brilliant forerunners of ethnography and anthropology on the basis of the ethnographic-like data that they gathered and on the methodology of data collection that they used. Following suit, in *Utopia and History in Mexico: The First Chroniclers of Mexican Civilization, 1520-1569* (1995), French historian Georges Baudot spelled out the nature of the ethnographic accounts composed by, or under the direction of, some of these
so-called ‘missionary ethnographers,’ including not only Olmos and Motolinía, but also Fray Martín de la Coruña and Fray Francisco de las Navas, who authored chronicles on the Tarascan and the Tlaxcalan cultures, respectively. Out of this group of sixteenth-century ‘missionary ethnographers,’ special interest has been paid to Sahagún. Contrary to Olmos, most of whose work is lost, and to Motolinía, whose accounts are written in Spanish, Sahagún’s twelve-book encyclopaedic work on the world of the Nahuas, *Historia universal de las cosas de Nueva España*—also known by the title of its surviving manuscript, the *Florentine Codex*—was originally completed in Nahuatl in 1569 and translated by Sahagún into Spanish by 1577.⁷

Since the 1950s, a number of scholars, including Garibay Kintana and, above all, Mexican historian Miguel León Portilla, began to argue that Sahagún behaved in a manner similar to that of a modern-day ethnographer or anthropologist. The idea has circulated for decades and can be found in a large list of works such as the biographies of Sahagún by Vicente Castro and Rodríguez Molinero (1986) and León Portilla (1999), edited volumes by Klor de Alva, Nicholson and Quiñones Keber (1988), and even in recent monographs and articles like those by Kavanagh (2012) and Solodkow (2014). General coincidences support this argument; Sahagún lived with the Nahuas, mastered their language, conducted fieldwork by designing questionnaires and interviewing informants, extolled some of the Nahuas’ traditions, and eventually reported collated results in a work that covers the same subject matters that are of interest to present-day anthropology. Nevertheless, Sahagún endeavoured to master Nahuatl because he conceived it as a proselytising tool; he applied a method of data collection in which he was versed as a confessor and as an interpreter at

---

⁷This study quotes the translation of the Spanish and the Nahuatl texts into English by Arthur J. O. Anderson and Charles E. Dibble, 1950-1982 as *Flor. Cod.*, followed by book and page. The title *Historia universal de las cosas de Nueva España* is hereafter referred to as *Historia universal*. 

42
inquisitorial proceedings, and he recognised some Nahua ‘virtuous’ behaviours because he wanted to prove that they occupied a place in Christian universal history; they were, in Sahagún’s words, ‘hermanos: procedientes, del tronco de Adam,’ [brothers, stemming from the stock of Adam] (Flor. Cod., 1950-82, Prologues, 49) (see also Ríos Castaño, 2014a). In his compilation and recording of data, Sahagún also found inspiration in the histories or accounts and descriptions with which he was familiar, such as Pliny’s *Historia naturalis* and the Franciscan Bartholomaeus Anglicus’s encyclopaedia *De proprietatibus rerum* (Garibay Kintana 1953-54, II, 67-71; Robertson 1966).

Writing about Central Australia, scholars have drawn attention to the ‘ethnographic’ works of the missionaries, who did indeed collaborate with scholars. Carl Strehlow’s collaboration with Freiherr Moritz von Leonhardi (1856-1910) resulted in the publication of *Die Aranda- und Loritja-Stämme in Zentral-Australien* [The Aranda and Loritja-Tribes in Central Australia], a comprehensive collection of myth texts, language and culture descriptions in five volumes between 1907 and 1920, while his close associate Otto Siebert researched Dieri culture in collaboration with the Australian anthropologist A. W. Howitt (Nobbs 2005, 28). Such scholars clearly valued the linguistic training and capability of the Neuendettelsau missionaries, whose understanding, gained through their building of relationships with Aboriginal people, was reputed to surpass that of monolingual Anglophone ethnographic fieldworkers such as Baldwin Spencer and Francis Gillen (see, for example, the arguments about the word *Altjira* [God] in Moore 2016).

The term ‘cultural translator’ that this study applies to Sahagún and Strehlow is born from an intersection between the disciplines of ethnography and anthropology and translation studies. In the ground-breaking *Writing Cultures: The Poetics and Politics of Ethnography* (1986), several academics, including the editors James Clifford and George E. Marcus and contributors Talal Asad and Vincent Crapanzano, state that ethnography is
an act of cultural translation and that its practitioners behave as translators in that their work consists of grasping and interpreting other cultures by rendering the foreign familiar. Reflecting on these arguments, Ovidi Carbonell i Cortés defines cultural translation as a superior level of interaction: ‘el proceso semiótico, antropológico, ideológico, sociológico y hasta artístico y político que se da cuando unas manifestaciones culturales se reinterpretan en otro contexto’ [The semiotic, anthropological, ideological, sociological, and even artistic and political process that occurs when certain cultural manifestations are reinterpreted in another context] (2004, 59, our translation).

Benefiting from this examination of the manner in which cultures are relocated or translated into a target context that differs from the source context and holds the power to manipulate the original in order to fulfil a given purpose, this chapter embraces this new approach towards the study of those incorrectly named ‘missionary ethnographers’ or pioneers of ethnography by reconsidering them as cultural translators; missionaries who strove to understand and codify the indigenous languages and cultures by applying their own cultural parameters. In Sahagún’s case, two scholars who have paved the way to reconsider him as such are Jesús Bustamante García and Walden Browne. Without designating him as a ‘cultural translator’ as such, they have put special emphasis on the manner in which he viewed the Nahua culture and moulded it to fit a Christian encyclopaedia that was palatable to European readers. Thus, in their doctoral dissertations, Bustamante García (1989) and Walden Browne (2000) examined the links of Historia universal with lexicographic and encyclopaedic works with which Sahagún was familiar, and demonstrated the manner in which he struggled to give form to all his material within a ‘pagan summa,’ which made sense of the new and alien environment that the world of the Nahuas meant for him and his contemporaries.
Scholars writing about Central Australian missionaries have lamented the fact that they appear to have lapsed into obscurity, and consequently attempt to claim a scientific respectability for them by associating them with contemporary and current anthropology and the roots of German anthropology in the writings of Johann Gottfried Herder (1744-1803). Anna Kenny’s acclaimed and comprehensive study, *The Aranda’s Pepa; An Introduction to Carl Strehlow’s Masterpiece* (2013) claims that Strehlow was following Herder in aiming ‘to document the plurality of peoples and their cultures in their own right’ (Kenny 2013, 246). In her view, Strehlow’s concern with particularism emerged from Herder and although the latter’s influence is not specific, Kenny (2013, 7) maintains that ‘his interests and emphasis reflect a pattern typical of the German tradition’ which can be traced to Strehlow’s education at the Neuendettelsau Mission Institute and his correspondence with von Leonhardi. Veit (1994, 79) discusses ‘the development of Carl Strehlow from missionary to ethnologist,’ a progression in Strehlow’s career or status that is also implied in the title of Kenny’s (2013) chapter ‘From Missionary to Frontier Scholar.’ Kenny goes so far as to claim that ‘Strehlow was not yet a part of a modern anthropology’ (2013, 245), suggesting that, given time, Strehlow would develop a modern anthropological perspective.

Yet, despite many references to ‘ethnography’ and ‘anthropology’ in Kenny’s work, most of which are used to apply to Strehlow’s *Die Aranda*—she calls it an ‘ethnographic masterpiece’ (2013, 28) and his ‘ethnographic oeuvre’ (2013, 2)—there is little evidence that Strehlow or Leonhardi saw their work as ‘ethnography’. Leonhardi does not apply the term to *Die Aranda* (Strehlow 1907-1920), although he uses it to describe Spencer and Gillen, unfavourably comparing their research with Strehlow’s on the basis of their lack of ability to speak Aboriginal languages and the radical differences in their methodologies. Nor were the first installments of *Die Aranda* reviewed or received as an
ethnographical work; Marcel Mauss (1909, 103) for example, calls it ‘a kind of Australian Rig Veda,’ which suggests that, for him, Strehlow’s collection of texts was akin to Sanskrit philology, and Andrew Lang (1909, 28) identified the purpose of the work as almost literary: ‘All philologists must thank him for he has given us our first Loritja as well as our first Aranda texts.’

The goal of the missionaries was conversion rather than the promotion of cultural diversity. In 1900, the Lutheran Mission Board in Adelaide indicated that it had no interest in supporting missionaries such as Otto Siebert, a colleague of Strehlow’s at the Lutheran mission at Lake Killalpannina, to make studies of culture but eventually resolved that,

Missionary Siebert is to feel quite at liberty to pursue such studies, but he is to see to it that he does not spend all of his energies in this one direction, but reserves sufficient time to do his work as a missionary and to send reports to the church carrying out this mission.’ (Nobbs 2005, 39)

In the view of Mission Board chairman Reverend L. Kaibel, the collection of Aboriginal myths collected by J.G. Reuther was ‘keinem Menschen etwas nützen’ [of no use to anyone] (cited in Volker 1999, 54). Ethnography was a temporary and subsidiary concern of the missionaries, particularly at an official level, and evidence is lacking that their primary goal of evangelisation through translation ever changed.

**Sahagún’s Translation of Nahua Culture**

Upon their arrival in colonial Mexico, the Franciscan friars embarked on the learning of the indigenous languages, driven by their need to comply with basic communication encounters and, more importantly for their mission, because a mastery of
these languages proved a crucial prerequisite of an evangelising programme that aimed at
the translation of doctrinal works, the elaboration of sermons and psalmodies, and the
administering of the sacrament of penance. In the case of the Nahuatl language, the
Franciscans engaged in a joint linguistic and cultural project that scholars have classified
into two separate periods. The first one comprises the decades spanning the fall of the
empire in 1523 to the year in which Fray Andrés de Olmos completed, imposing Latin and
Castilian orthographical and grammatical conventions, his Nahuatl grammar or Arte de la
lengua mexicana (1547).\(^8\) The second period stretches up to the end of the sixteenth
century, during which knowledge of Nahuatl deepened, as evidenced by the elaboration of
other vocabularies, grammars, and religious works, such as catechisms, books of prayers,
doctrinal treatises and sermons.\(^9\)

Fray Bernardino de Sahagún’s works are a reflection of the evolution that this
concerted effort of learning and codifying the language for conversion purposes
experienced throughout the two aforementioned sixteenth-century periods. Like Olmos, in
1547 Sahagún completed (together with an unknown number of Nahua assistants) the Libro
de la Rethorica, y la philosophia moral, y theologia: de la gente mexicana, a compendium
in Nahuatl of ceremonial speeches, sayings, riddles and metaphors that he translated into
Spanish in 1577, and incorporated into Historia universal as Book VI.\(^10\) In collecting

---

\(^8\) Nebrija’s decisive influence in setting the framework for the codification and
study of other languages has been widely studied. See, for instance, the third
volume of the series Missionary linguistics / Lingüística misionera, co-ordinated by
Otto Zwartjes.

\(^9\) For further references on these two periods, see the studies by Karttunen and
Lockhart (1976) and Díaz Rubio y Bustamante García (1986). Burkhart’s work and,
in particular, her monograph (1989) continues to contribute to an understanding
of the manner in which missionaries translated the Christian message in doctrinal
texts that were composed in Nahuatl.

\(^10\) Sullivan’s edited translation and Ruiz Bañuls’s monograph are pertinent readings
for an insight into this 1540s text.
material for this book, Sahagún wished to provide missionaries with authentic examples of the language on which they could draw to emulate the ancient Nahuas’ rhetorical style during the composition of their religious communications. Inspired, among other classical and patristic sources, by Augustine, Sahagún was under the impression that upon hearing oral representations of their Nahua rhetoric and moral eloquence, the listeners would evoke the right path towards evangelisation; they would be awakened in the belief of the Christian message (Bustamante García 1992, 347-348, 356). Ten years after his first incursion into the codification of Nahua rhetoric, Sahagún’s production of texts was given a new impetus. In 1558, he was commissioned by his superior, Fray Francisco de Toral, to write ‘en lengua mexicana, lo que me pareciese, ser vtil: para la doctrina, y manutencia, de la cristiandad, destos naturales, desta nueva españa’ [in the Mexican language that which seemed to me useful for the indoctrination, the propagation and perpetuation of the Christianisation of these natives of this New Spain] (Flor. Cod., 1950-1982, Prologues, 53). Out of this project are known to have derived a grammar with an appended vocabulary, which is lost; a collection of chants, identified as Psalmodia christiana y sermonario de los sanctos del año; a collection of sermons comprising a Sermonario and the Adiciones, apendice a la postilla y exercicio quotidiano; the doctrinal dialogue Colloquios y doctrina christiana; and the ‘doze libros’ [twelve books] or ‘historia’ [history], as Sahagún sometimes called Historia universal.11

Historian Jesús Bustamante García claims that, compared to the Libro de la Rethorica, the creation of Historia universal responds to Sahagún’s willingness to accomplish a more ambitious lexicographical project; the supply of a wider variegated corpus of texts that encoded the totality of the Nahuatl language in its context of use.

11 Sahagún refers to these works in Flor. Cod., 1950-1982, Prologues, 54-55, 71. These texts have been edited by León Portilla and Anderson.
whether to refer to their gods, ceremonies, and beliefs or to their surrounding nature and their description of people and ways of life (Bustamante García 1989, 699-700, 731-3). In his prologue to Book I of Historia universal, Sahagún unveils this intention of laying ‘fundamentos …, todas las maneras de hablar, y todos los vocablos, que esta lengua usa: también autorizados y ciertos: como lo que escriuyo Vergilio, y Ciceron, y los demas autores, de la lengua Latina’ [the groundwork…, all the manners of speech and all the words this language uses, as well verified and certain as that which Virgil, Cicero, and other authors wrote in the Latin language] (Flor. Cod., 1950-82, Prologues, 50). In other words, Sahagún attempted to transform the Nahuatl language, as pronounced by cultured native speakers, into autorizados or certified texts of pure language, from which terminology and examples of use could be extracted for the creation of a future Nahuatl dictionary, which he expected to resemble that of the Augustinian lexicographer Ambrogio Calepino (Sahagún Flor. Cod, 1950-82, Prologues: 50; Bustamante García 1992: 340-341). 12

Calepino’s dictionary was not the only literary model Sahagún conceived for the production of his historia. Alongside Sahagún’s lexicographical intention rests his wish to furnish churchmen with information on the ‘idolatrous’ nature of the Nahuas’ gods, ceremonies, and beliefs that ought to identified and extirpated. Thus, Sahagún explains: ‘Para predicar contra estas cosas y aun para saber si las ay: menester es, de saber como las vsau[an] en tiempos de su ydolatria’ [To preach against these matters, and even to know if they exist, it is needful to know how they practiced them in the times of their idolatry] (Flor. Cod., 1950-1982, Prologues, 45). And he tailors his work not only to the preacher,

12 Calepino’s Cornucopiae, popularly known by the author’s surname as the Calepin, was a widely-circulated Latin dictionary that contained examples of use that Calepino had found in classical sources. Its popularity was such that, by the end of the sixteenth century, the dictionary became a multilingual work including the translation of entries into the main European languages.
who speaks ‘para endere[z]ar contra ellos su doctrina’ [in order to marshal his teachings against them] (45) and open the Nahuas to the truth of Christianity, but also to the confessor ‘para sauer preguntar lo que conuiene y entender lo que dixeren’ [in order to know how to ask what is proper and understand what [penitents] may say] (45). Bearing in mind these target readers, Sahagún was after an encyclopaedic referential work that would encapsulate the texts he had consulted in the library of the Friary of San Francisco in Salamanca, where he took his vows in the 1520s, and those he continued to consult in the library of the Friary and College of Santa Cruz of Tlatelolco, where he resided many years of his life in New Spain. Tlatelolco, like any other Franciscan centre of studies, stored a large number of religious works, such as collections of sermons, treatises of vices and virtues, confession manuals, and breviaries, together with encyclopaedic works like Pliny’s book on animals and Olaus Magnus’s *On the Description of the Northern Peoples* (1555).  

These works, however, comprised information on European and Christian cultures, either in Latin or Spanish. Sahagún noticed the void of similar texts in the Nahuatl language and set out to create a work that incorporated data on indigenous traditions and beliefs, with a view to the more effective dissemination of the word of God and the destruction of what he regarded as idolatry. To this end, he selected topics and collected material following the themes and categorisation of knowledge that he found in the works with which he was acquainted. Thus, behaving as a cultural translator, Sahagún designed a compartmentalised template of knowledge that relocated his translation unit—what he had decided to record on the world of the Nahuas—into a harmonious rearrangement of data that, mirroring classical and medieval hierarchically-ordered encyclopaedias, organised the information on the Nahua world into three main areas; divine, humane, and mundane. For  

---

13 For a full catalogue of the library from the sixteenth century onwards, see Mathes (1982).
this macro level organisation, two of his textual archetypes were Pliny’s *Historia naturalis* and Anglicus’s *De proprietatibus rerum*, extensively drawn on by the Franciscans in their composition of sermons (see Garibay Kintana 1953-54, II: 67-71; Robertson 1966, 623; Roest 2000, 211, 286-289). At a micro level, whether for the organisation of a book, or a section within a book, Sahagún imitated the structure of religious works, such as the Roman Breviary, collections of sermons and rhetorical figures, treatises of vices and virtues, and confession manuals. The influence of these texts is perceived, respectively, in Book II, on Nahua festivities and rites; in Book VI or *Libro de la Rethorica*; and in Book X, in which the categorisation of family members and professions abides by a Christian virtuous versus sinful dichotomy. Since the links between European Christian models and the contents of books VI and X have been already demonstrated (Ríos Castaño 2014a and 2014b), this study concentrates next on the influence that the Roman Breviary exerted on the production of Book II.

1. *The Roman Breviary as a Model for Book II of Historia Universal*

Sahagún’s earliest accounts of Nahua rituals appear in Chapter I—on rituals and gods—of the first known draft of *Historia universal*; the *Primeros memoriales* of Tepepulco (ca. 1559-1561).14 For instance, its paragraphs depict the major ceremonies of the *veintenas* [twenty-day periods], followed by data on numerous basic ritual practices, types of priests, deities’ attire, prayers, oaths, and sacred chants. Interestingly, in the portrayal of the *veintenas*, Sahagún expresses an interest in informing readers of the dates during which each festival used to take place according to the Roman or Julian calendar. Thus, the

---

14 A translation from Nahuatl into English by Thelma D. Sullivan is available together with a facsimile reproduction, published by the University of Oklahoma Press.
celebrations in honour of the maize plant, known as Huey tonoztli [the Great Vigil] are said to fall on the seventh of April, and those of Etzalcualiztli [the Eating of the Etzalli—a meal made of corn], in honour of the rain god Tlaloc, on the seventeenth of May (Sahagún 1997, 58-59).

That Sahagún recorded information by bearing in mind not only the Roman calendar but also the Christian liturgical year is also visually perceptible in the presentation of the first eighteen chapters of the final manuscript; the Florentine Codex. Here, the written explanations of dates, as found in the Primeros memoriales, are moved to two columns flanking the description of the festival; the left-hand column reflecting the Nahua solar calendar, and the right-hand one the Roman calendar, as Sahagún calls it. Each column is composed of two vertical lines; the external line comprises numbers referring to the days of the month in the Nahua and the Roman calendars, and the interior one to letters ‘a’ to ‘g.’ standing for the days of the week. Willing to provide exact dates in which the Nahuas could still be celebrating their ‘idolatries’ in secret, Sahagún explains the purpose behind his insertion of these columns in the following manner: ‘ansi se puede facilmente entender, cada fiesta de las suyas, en que dia caya, de los nuestros meses’ [so it can be easily understood in what day of our months each of their feasts fall] (Flor. Cod., 1950-82, Prologues, 57). To be also noted is that, possibly in his attempt to pinpoint with exactitude the dates of those ‘idolatrous rites,’ Sahagún added a few marginal notes on the right-hand side of the page so as to inform the reader when a Christian festivity or saint day fell on the

---

15 Sahagún conceived this format already during the second stage of his investigations in Tlatelolco, sometime between 1561 and 1565. In some drafts resulting from this period (Manuscrito de Tlatelolco) the vertical lines in both sides of the text are already inserted, see for instance, Sahagún 1905-07, VII, 195 (fol. 129v).
same Nahua ceremonial period. For instance, in the description of the third Nahua festivity, 
*Toçoztontli*, the second of April is signalled with the annotation ‘Mariae egiptiaca’—the 
penitents’ patron saint St Mary of Egypt--; and in the tenth festivity, *xocotl vetzi*, on the 
twentieth of August, the date contains the annotation ‘Bernardi abbatus’—the abbot and 
Doctor of the Church, St Bernard of Clairvaux.\textsuperscript{16}

These visual clues—vertical lines representing the Roman calendar and marginal 
annotations—are inescapably connected with the Roman Breviary. Gradually formed over 
the course of centuries up to the end of the seventh century, the Breviary is at once a 
handbook consisting of all the liturgical texts for the performance of the Office and a book 
of prayers to be recited daily by priests and members of religious orders. A composite work 
of texts, it usually falls into four parts: the Roman calendar with the aforementioned vertical 
lines; the Psalter or collection of psalms, together with hymns and canticles for Sunday 
mass and other ferial offices; the *Temporale* or calendar of movable feasts observed, for 
instance, at Easter; and the *Sanctorale* or offices proper to the saints’ days (Baudot 1929, 
40, 112-140). Breviaries were adapted throughout the centuries by different orders and 
religious communities, an example of which is the fifteenth-century Bridgettine breviary 
of the nuns of Syon Abbey, in Devon, England.\textsuperscript{17} Their handbook includes a calendar of 
months indicating days of saints and festivities, orations to be prayed, and sermons to be 
read on different days of the week, at different times of the day, on special celebrations,
and as a tribute to various saints. The breviary also contains information on principal festivities and feasts, such as the conception of the Virgin and Christmas; readings for mass services; and occasional prayers, including prayers after a death, for the Church, and for the traveller.

The final contents of Book II of *Historia universal*, concerned with the ‘calendario, fiestas, y cerimnjas, sacrificios, y solenjdades… a honrra de sus dioses’ [calendar, feasts, and ceremonies, sacrifices, and solemnities … in honour of their gods] (*Flor. Cod.*, Book II), also appear to find a counterpart in the Roman Breviary. The book is divided into thirty-eight chapters and an appendix. The first eighteen chapters comprise information on annual festival seasons and fixed festivities, in the same way as the Christian liturgical year celebrates, for example, Christmas. Chapter XIX consists of eighteen ‘movable feasts,’ which Sahagún probably codified following the information of the *Temporale* in the Roman Breviary. Finally, chapters XX to XXXVIII incorporate further data on ceremonies celebrated throughout the year, and the appendix incorporates twenty sacred songs in honour of several Nahua gods, which is again a reminder of the collection of hymns and canticles of the Roman Breviary. Thus, both the selection of topics—fixed and movable feasts, description of ceremonies, and sacred songs—and their arrangement come to demonstrate that Sahagún was involved in a process of cultural translation, whereby the Nahuas’ religious practices and beliefs became his own unit of translation, that is to say, his abstraction or general conception of what had to be codified, and which he relocated into a book that mirrors no less than the most important liturgical breviary of the Roman Catholic Church. The creation of Book II did not rest on ethnographic-like interests but rather it pursued the destruction of the Nahuas’ religion by following two routes; the understanding of Nahua festivities and ceremonies, how and when they were celebrated,
and the codification of language associated with Nahua religion so as to be used for evangelisation.

Translation and Philology in Central Australia: the Lutheran missionaries

The purpose of this section is to explain the Central Australian missionaries in their role as cultural translators of the late nineteenth and early twentieth centuries. I argue that the missionaries were not primarily ethnographers or ethnologists, as Veit (1994) appears to claim, but that they were cultural translators who had a strong grounding in philology, a discipline that developed in Germany to a high degree throughout the nineteenth century and which influenced German missionary training institutes. The missionaries translated religious literature such as Luther’s Der Kleine Katechismus [Small Catechism], hymns, prayers and Bible passages into the Aranda language of Central Australia. They also wrote and translated sermons into Aranda and preached them on Sundays. Sermons appeared early among their translations as the oral text or spoken word had been of primary importance in Lutheranism since the sixteenth century (Graham 1993, 141; Kleinhans 2015, 24). Eventually they would translate the New Testament. The translations made by the missionaries assisted with their expository, catechetical, exegetical and pedagogical tasks, and their translation practice was constrained by their theological agenda. In this section I explore the ways in which the missionaries used philology and collected key terms as part of the Lutheran missionary goal of translating the key texts of Lutheran Christianity into the Aranda language, arguing that their main goal was evangelisation through translation.

Missionary training was training in a text-based philology that was closely allied to theology. As Pugach (2012, 37) asserts, ‘above all else, nineteenth-century Protestant missionaries considered language the most practical means of disseminating the gospel.
Religious concerns therefore guided them to philology,’ an approach that was grounded in the Reformation and Humanist catch cry of ad fontes [back to the sources] (Moore 2015). After Luther’s translation of the Bible into German, and with a ‘Renaissance interest in the study and promotion of ancient texts’ (Ellingworth 2007, 110), the goal of the Lutheran Reformers was the translation of the Bible into modern European vernaculars. Ostler (2004, 44) says of the Spanish friars of the sixteenth century that they had to become analytical linguists, and this is also true of the German Lutheran missionaries. Their linguistic analyses enabled them to translate texts. Veit (2004, 136) finds that, rather than what we might think of today as anthropological subjects, the learning of languages ‘figures prominently on the curricula’ of the mission seminaries (2004, 140). Philology was central to the codification of foreign languages and the task of translating the Bible, catechism and hymnal. Translation, interpretation and exegesis using bilingual dictionaries and grammars were key components of the curriculum.

The first missionaries to Central Australia, sent by the Hermannsburg mission in Lower Saxony, Germany, were Hermann Kempe and W.F. Schwarz, who arrived in 1877 and were joined by Louis Schulze in 1878, with Kempe and Schulze remaining at the mission station in Central Australia until 1891. They were succeeded by temporary caretakers until the arrival of their successor Carl Strehlow from the Neuendettelsau mission. He had arrived in Australia in 1892, initially learning the Dieri language at Lake Killalpaninna and translating the Dieri New Testament with J.G. Reuther, before moving to Hermannsburg in 1894.

Uppermost for the Neuendettelsau missionaries was a confessional Lutheranism which, as described above, developed in reaction to Enlightenment rationalism, and fostered a renewed interest in the Bible and the Lutheran confessions that revived the sixteenth-century agenda of the Reformers. Academic influence was exerted on
Neuendettelsau by Erlangen University, described by Pugach (2012, 72) as ‘conservative, confessionalist, and romantic’. It was ‘[n]eopietist in nature and harkened back to the original precepts of Luther’ (72). Neuendettelsau emphasised verbal disciplines, including rhetoric and the priority areas of dogmatics and ethics, which were argued and defended verbally. This is in contrast to the Hermannsburg Mission Institute in Germany, which, closer to the Pietist movement and with similarities to the Moravians with their emphasis on practical deeds, ‘preferred people with practical skills’ (Veit 2004, 143).

The confessional nature of the philological education at Neuendettelsau can be seen in the work of Friedrich Bauer. In 1849, Bauer was employed full-time on behalf of the Gesellschaft für innere Mission im Sinne der lutherischen Kirche, [Society for the Inner Mission of the Lutheran Church] and given the direction of the Neuendettelsau mission preparation institution. In Rössler’s view, Bauer’s talent was to establish a systematic and pedagogically-sound basis for the training of mission candidates, in contrast to the ‘spontaneous, and unsystematic’ (Rössler 2012, 21) approach of the mission’s founder, Wilhelm Löhe, Bauer developed the curriculum and wrote a textbook for each subject that he taught: German grammar, Latin grammar, dogmatics and ethics. The degree to which even grammar was confessionally-oriented can be seen by examining Bauer’s *High German Grammar* (Fuchshuber-Weiβ 2013, 111), in which the majority of his sources (Bauer 1859, 160) are written by Lutheran reformers, pastors, poets and hymn writers, with a preponderance of sources from the ‘classical age’ of Lutheranism in the sixteenth century. The few secular sources are sixteenth-century humanist authors such as Sebastian Franck, and the more recent works of Goethe, Schiller and Lessing from the eighteenth century. Paramount are Luther’s Bible, Catechism and hymnal. An example taken from the New Testament (Bauer 1859, 121) concerns the key Lutheran doctrine of Justification by Faith which is used to illustrate adverbial clauses: ‘Nun wir den sind gerecht worden durch den
Glauben, so haben wir Friede mit Gott.’ [We are justified by faith, and thus we have peace with God]’ (Romans 5:1, original emphasis). Such was the confessional nature of his grammar that Bauer was compelled to make separate Protestant and Catholic versions, replacing Lutheran sources with Catholic ones to make a grammar that would be suitable for Catholic schools, particularly for use in Austria (Vorländer 2014, 34).

2. Carl Strehlow: Missionary, Scholar and Pioneering Bible Translator

In the twenty-eight years that Strehlow spent at Hermannsburg until his death in 1922, he wrote a grammar of the Aranda language, compiled a dictionary and translated liturgical and educational materials as well as working on the extensive *Die Aranda*. Kenny claims that ‘Strehlow’s opus sits comfortably as an early field project in the Boasian tradition of anthropology’, thus supporting her view of Strehlow as an anthropologist ‘in the making’, so to speak (2013, 243). She is referring to Franz Boas (1858–1942), a German emigrant who contributed significantly to the reorganisation of anthropology in the United States. His contributions were in fieldwork and linguistic description through the publication of the *Handbook of American Indian Languages* in 1911, establishing the standard for writing grammars of American Indian languages. Boas (1911/1966, 59) made his aims clear: ‘a knowledge of the Indian languages serves as an important adjunct to a full understanding of the customs and beliefs of the people whom we are studying.’ His language-focused approach, including the codification of languages in texts and the development of dictionaries and grammars as means of interpreting those texts, was similar to that of Strehlow, who strove to raise Aranda to the level of a written language. *Die Aranda* brought Aboriginal language, texts and culture to an international, although largely German-speaking, audience.
Despite these similarities however, Strehlow’s training at Neuendettelsau differed significantly from that of Boas who was trained in the natural sciences and lacked formal training in language-related disciplines. Boas took from text-based philology the methods of description of languages and peoples through what Stocking (1974, 455) describes as a ‘rather generalized familiarity with European philological traditions.’ As a secular Jew from Germany, Boas was distinct from the Neuendettelsau missionaries whose identification was with religion rather than German nationality.\footnote{Hermannsburg missionaries largely worked in British colonies—Neuendettelsau missionaries initially worked in English-speaking North America, ministering to German-speaking Lutheran congregations—and ‘for most of the nineteenth century, German missionaries did not support a specifically German colonialism and often worked in the service of the British’ (Pugach 2012, 49). Theirs was a religious rather than a national task. It was ‘their Christianity and not their Germanness that mattered’ (Pugach 2012, 23).} This is evident in Strehlow’s own work. While the writing of his Die Aranda was effectively finished with Leonhardi’s death in 1910, Strehlow continued to work on his translation of the Aranda New Testament (Douglas 1962, 172), until his own untimely death in 1922. The translation of the four Gospels into Aranda was published in 1928, and his New Testament translation was revised by his son Theodor and published by the British and Foreign Bible Society in 1956 (Soesilo 2007, 172). Throughout his life, Strehlow’s work as missionary, frontier scholar and pioneering Bible translator remained a religious, rather than an anthropological undertaking.

3. Translating culture in theological terms

Rather than situating Strehlow in a ‘Boasian tradition of anthropology’, I would argue that the Neuendettelsau missionaries were closer to the devout Lutheran, Max Müller (1823-1900), whose philological outlook led him to the study of religions (Cox 2006, 73).
Missionaries such as Strehlow’s colleague, Siebert, read the work of Müller, who also stressed the importance of learning languages and understanding societies through their languages. Another important influence for Neuendettelsau missionaries was the missiologist Gustav Warneck (Nobbs 2005, 35) who advised ‘above all the talent for learning foreign languages’, as it would be valuable for understanding the other cultures.

These philological and religious preoccupations are reflected in the main fieldwork priority of the Central Australian missionaries, which was to identify indigenous words suitable for the key theological terms so central to what Kempe described as their ‘real task’ of Bible translation (Scherer 1973, 13). To these German translators, the Aranda language appeared to lack the expressions needed to convey Christian concepts. Simple artefacts and physical objects were little challenge, but language for emotions, mental states, religion and government differed markedly between the Aboriginal and German languages. Early in his missionary career at Hermannsburg in Australia, Kempe (1881, 31) reached the conclusion that: ‘Wörter wie diese: Koenig, Reich, Gewalt, Herrschaft, Himmelreich, ich find absolut gar nicht vorhanden’ [Words like these: king, empire, domination, lordship, heavenly kingdom, I find are absolutely non-existent.]

Where concepts appeared to be incommensurable across cultures, the easiest strategy initially was to adopt loanwords. Very few key terms derived from Aranda appear in the 1891 hymnal. Kempe (1891a) drew instead on English, German and European classical languages, for example: kros (cross), heiden (heathen) and disipula (disciple). In his revision of the hymnal, however, Strehlow (1904) replaced the foreign terms with terms derived from Aranda. In the explanation of the Fourth Commandment, for example, Strehlow used kutungula [ceremonial helper] for ‘disciple’ and replaced Kempe’s serwilitjika [to serve, derived from Latin], with Aranda kutungula nitjika [to be a ceremonial helper]. In another example, in the translation of the Gospels, Strehlow replaced
Kiria (Kempe 1891a) from Κύριε/Kyrie [Lord] in New Testament Greek with Inkata, an Aranda word used to indicate a ceremonial leader.

Although these terms ‘sustained some homologies’ between Christian and Aranda concepts, as Austin-Broos (2010, 21) has observed, the existing Aranda terms were only approximate, and difficulties remained in using them to translate a European Christian theology. Strehlow (1907-1920, 73) recalls the difficulty he encountered with using arknanaua, an Aranda word for Steinhöhlen or ‘rock caves’, as a key theological term for Kirche [church (building)]. While arknanaua was a possible appropriate term—even suggested to him by ‘zwei getauft Schwarze’ [two baptised Blacks] (73.)—because ‘diese Höhlen werden als heilige Orte’ [these caves were like holy places], the word was culturally specific, being limited in its meaning as ‘Aufbewahrungsort der Tjurunga’ [a storage place for Tjurunga (sacred objects)], to which access was restricted to initiated men and not applicable to a Christian church building. This seemed incompatible with Strehlow’s evangelical intentions, and he dropped the use of the term ‘because the blacks associate too many heathen perceptions with the word arknanaua.’ (73.), choosing instead the more general term ilta for Haus or Hütte [house, hut].

Missionary research was often limited by the attitudes of the religious authorities which largely viewed indigenous religions as ‘heathen’ and feared syncretism. As mentioned above, Siebert, for example, was criticised by the Lutheran Mission Committee chairman Gustav Rechner for allowing his research to interfere with his missionary duties and ‘trying to impress the truth of salvation on the blacks using the medium of their heathen perceptions.’ (Nobbs 2005, 32). Siebert’s letter in response to the Mission authorities in Adelaide (dated March 28, 1900), however, justified his research, not as disinterested scholarly work, but in terms of its practical usefulness to missionary activity and totally commensurate with the aims of the Mission Committee.
Such constraints also meant that, throughout the nineteenth and first half of the
twentieth century, missionaries were expected to translate literally, often resulting in
‘unnatural and sometimes incomprehensible, renderings’ (Zogbo 2009, 24). Ellingworth
(2007, 136) notes that ‘during this period, the official policy of the British and Foreign
Bible Society was that the New Testament must be based upon the Textus Receptus of the
Greek text. (The Bible translations of German missionaries were often published by the
British and Foreign Bible Society.) It was also expected that the whole Bible would
generally conform to the King James (Authorised) Version of the English Bible. Where the
translators failed to meet this requirement, the Bible society refused to publish their
translations. Pugach (2012, 39) claims this was also the case for Bible translators in Africa.
Literalism accounts for the way in which missionaries translated idioms and figures (Moore
2015, 45), which constrained the translations of the Neuendettelsau missionaries.

The earlier literal translations when missions controlled many aspects of
Aboriginal life contrast with translations of the late twentieth century such as those by
missionary translator Ken Hansen into Pintupi-Luritja, a neighbouring Western Desert
language to Aranda. Translating with the Summer Institute of Linguistics in the 1970s at
the height of the era of the Self-Determination policy, during which Aboriginal decision-
making was encouraged and had moved to the foreground of government policy (Albrecht
2002, 206), Hansen reflects on his translation strategies in the preface to the Pintupi-Luritja
Old Testament selections Katutjalu Watjantja Yirritiṭjanu (1981). He writes that he
followed the translation principles of idiomatic translation, a translation in which meaning
is privileged over form according to the standard Bible translation text of Beekman and
Callow (1974). Hansen (1983, 16) explains that the aim of idiomatic translation is to

19 Kempe’s 1891 grammar (Kempe 1891b) was published in English.
convey a message from the original language to the receptor language in natural receptor language grammar and speech forms. He recalls the difficulty of translating incommensurability; ‘How to translate even the basic New Testament terms meant much discussion and experimentation’ (16), with the aim of making an idiomatic translation that was acceptable to Pintupi-Luritja speakers.

By the 1970s, in line with the changing political climate and social attitudes, Lutheran Mission policy had shifted to a tolerance of aspects of traditional Aboriginal religion, which was seen as having a legitimate role in maintaining order in Aboriginal societies (Albrecht 2002, 74). These changed attitudes meant missionaries were less likely to appropriate Aboriginal words and attempt to replace their original meanings with Christian concepts.

The adoption of Altjira by Hermannsburg missionaries as the term for ‘God’, for example, shows the overwriting of traditional meanings associated with Aboriginal religion. Traditionally Altjira referred to ancient times, Aboriginal tradition and religion and, like the European Christian theological terms discussed above, is not easy to translate into English (Moore 2016). Kempe had described alxira (Altjira) in connection with a being:

Dieses nennen sie alxira, und schreiben ihm die Schöpfung Himmels und der Erde zu, sagen auch, dass er in Himmel wohne und den Menschen geneigt sei, wenigstens ihnen nichts Böses zufüge.

[They call this alxira and attribute to him the creation of the sky and the earth; they say too that he lives in the sky and is well disposed to humanity, or at least doesn’t cause them any ill.] (Kempe 1881, 55).
*Altjira* seems to have been used as the Aranda word for *Gott* [God] from around 1880, in translated hymns. The Hermannsburg missionary Schwarz (1881, 76) reports that the mission community were singing the hymn ‘Alxir alkiela’ [God in heaven] at Christmas, and of the fifty-three hymns which appear in the 1891 hymnal *Galtjintana-Pepa: Kristianirberaka Mbontala*, (Kempe 1891a), thirty-six contain *Altjira* as the translation for ‘God.’ Strehlow retained *Altjira* in the 1904 revised hymnal.

The translation of *Altjira* as ‘God’ involved a significant shift in the semantics and syntax of the original word (Moore 2015). *Altjira* became animate, unlike the way it had occurred in traditional usage. In grammatical terms, the shift in characterisation of this ‘being’ now meant that *Altjira* was being used with an Ergative case marker to indicate that it was the agent of a transitive clause, calquing the syntax of the source language, as in the following example from Kempe’s grammar (1891b, 9):

```
Altjirala jingana etata ntema
```

God-AGENT (to) me-ACC life gives

‘God gives me life’

(AGENT is the Agent of a transitive clause. ACC is the Accusative Case, indicating the object in a transitive clause).

The adoption of *Altjira* as a theological key term involved a significant and lasting change in its function; it has now become the word for ‘God’ in the Western Arrarnta language and some adjacent language regions, replacing its earlier meaning (Green 2012, 171). Aboriginal people at the Hermannsburg Mission in the late nineteenth century are likely to have had reservations about the use of *Altjira* for God, given the semantic and syntactic dissonance of the translation. Given missionary concerns about syncretism and
considering that Kempe usually adopted loanwords for key theological terms, it is perhaps surprising that he (rather than, say, Strehlow) chose *Altjira* as the term for ‘God, although the choice can probably be explained by the evidence in his Mission Report (Kempe 1881, 55) that he thought that *Altjira* represented an animate being. Indeed the Lutheran missionaries adopted a word which originally had the semantic field of *Altjira* for ‘God,’ rather than a loanword such as ‘Gott, God or Deo’, as were adopted elsewhere in Oceania (Capell 1969, 156). For Strehlow the missionary, *Altjira* was a theological key term for ‘God,’ inherited from the previous missionaries and established by the time he arrived in Hermannsburg in 1894. In his research collaboration, however, he sought its traditional pre-Christian meaning (Moore 2016), which some anthropologists saw as indicative of contradiction and bias (Spencer and Gillen 1927, 595). Yet the anomalies can be understood in the context of Strehlow’s dual roles of missionary and researcher, with the different tasks of translating theological texts and translating as part of research undertaken for distinct purposes and audiences. Linguistic research and scholarship could be deployed for different purposes just as Humanist scholarship was used by the Reformers in the sixteenth century (Moore 2015).

A century after Kempe’s initial translation of *Altjira* in Aranda hymns and its adoption into translation of Bible passages, there were discussions about the key term for ‘God’ in Pintupi-Luritja. The word *Tjukurrpa* (equivalent to Aranda *Altjira*) was seen by Pintupi-Luritja speakers as inappropriate for the translation of ‘God’ because they saw Christian theology and Aboriginal worldview as separate domains and the use of the same word in both domains as confusing. Hansen (1983) used another term, *Katutja*, for ‘God,’

---

20 In Papua New Guinea, *Anutu*, a word borrowed from the Yabem language, was used. In the Kâte language, *Nemu*, with a meaning of ‘primordial beings’, was adopted (Capell 1969, 156).
meaning ‘one from above,’ which could not be confused with terms from the traditional culture.

**Conclusions and Future Directions**

As we have aimed to demonstrate in this chapter, the engagement of the indigenous languages in both New Spain in the sixteenth century and Central Australia in the early twentieth century are both strikingly similar and interestingly different. The similarities arise from the centrality of religion in society and the movements for change, such as the Renaissance across sixteenth-century Europe and religious reactions which followed these movements. Modern European vernaculars emerged at this time and were codified following Humanist influences, which were felt in sixteenth-century Europe of the Renaissance and Reformations and later revived in nineteenth-century Germany. The codification of European vernaculars with the purpose of elevating them to a literary standard was a catalyst and guide for the codification of indigenous languages. Thus, in the case of Nahuatl, Sahagún strove to gather texts that ‘authorised’ or certified the purity of the language. The Franciscans applied their knowledge of lexicography and doctrinal texts, and the Lutheran missionaries applied philology to the understanding and codification of the languages which they encountered in the newly-colonised continent of Australia. The documents they compiled were used for the conversion and proselytisation of the indigenous peoples to the Christian faith. In Sahagún’s case, his investigations of the Nahua culture, superficially equated to modern ethnography, were born from evangelising duties, including his expertise on confessional and inquisitorial techniques to collect data and his reliance on doctrinal parallel texts. In the German missionaries’ case, they gained a growing awareness of Aboriginal societies through their rapid acquisition of Aboriginal languages. While in both cases their goals were theological, the most significant difference rests on
the manner in which they worked to compose doctrinal texts in the indigenous languages. In New Spain, Sahagún believed that mastering Nahuatl and creating doctrinal texts anew rather than translating them from Latin and Spanish was vital for conversion, whereas Bible translation was a long term goal of the Lutherans.

If the Franciscan and Lutherans’ evangelising aims are not understood as examples of cultural translation, then it is tempting to make teleological claims about their work, mistaking their intentions and reading their work as if they had conducted research as ancestors of modern anthropology. The discipline of anthropology was only established in the late nineteenth century—even ‘professional’ anthropologists such as J.G Frazer were trained in Classics and could hardly be considered to have studied anthropology as a fully developed discipline (Kenny 2013,80)—and the missionaries’ primary concerns were the understanding of indigenous cultures and languages for evangelising purposes, rather than the scientific, disinterested investigation of cultures or the promotion of cultural and linguistic diversity.

In sixteenth-century New Spain, Sahagún directed the composition of an encompassing work on the world of the Nahuas that mirrored classical and medieval encyclopaedias, and incorporated the format of doctrinal texts, such as the Roman Breviary. His work was initially targeted at churchmen as a reference manual for conversion and it was never intended for public dissemination of the Nahuas’ beliefs and ways of life. In their attempt to support Strehlow’s reputation, Veit and Kenny have tended to overstate his engagement in ethnography. This view underestimates a tradition of translation and philology which was virtually unrecognisable to contemporary and later British and Australian anthropologies. Although Strehlow made scholarly investigations in the field, his ultimate goal was the conversion of the Aranda people through the translation of the key texts of Lutheran Christianity.
Recent studies on Sahagún and *Historia universal*, such as Solodkow (2014), maintain the position that Sahagún was a colonial ethnographer and others, such as Hidalgo Brinquis and Benito Lope (2013), continue to focus on the material elements, the illustrations, and the structure of its surviving manuscripts. Thus, there is room for further studies that aim to continue restoring Sahagún to his historical and cultural milieu by, for example, investigating the textual characteristics of *Historia universal* with regard to the clerical duties for which it was first created, and by comparing it with other works with which it shares socio-cultural structures. Given its encyclopaedic nature, a deeper exploration of *Historia universal* could elucidate its connections with other comparative texts written by, or under the direction of, other churchmen during the early Latin American colonial period, such as Fray Andrés de Olmos and Fray Toribio de Benavente, Mololínia—also labelled as ‘pioneering ethnographers.’ Such studies would open new avenues of investigation into verifying or contesting our view of how these missionaries acted as cultural translators, appropriating information on indigenous cultures and rendering it according to their worldview.

To date, there is very little research on the history of missionary linguistics and translation in Australia and an overall neglect of language as central to the work of Lutheran missionaries, leading, as argued here, to a distorted and teleological view that they were working as ethnographers. Nor has there been adequate discussion of their translations. In a history of Bible translation worldwide (Noss 2007), Soesilo’s chapter on the Asia-Pacific and the Americas (2007) briefly discusses the Dieri New Testament translation of Neuendettelsau missionaries Reuther and Strehlow (1897), and the most recent Bible translation he mentions dates from the mid-twentieth century, despite the completion of many Aboriginal language New Testament translations in the last six decades. The field is wide open for further studies on the theoretical bases and language ideologies of the
German philological tradition, the training of German missionary linguists, and their immense contribution to linguistic research and translation in Australia.

**Further Reading**


This ground-breaking study focuses on the Franciscans and Dominicans’ attempts to translate Christian dogma for the Nahuas, and the extent to which the missionaries managed to appropriate some of the cultural metaphors, used by the Nahuas to understand the world, into their doctrinal discourse.


This collection of essays explores how ethnography decodes and encodes foreign cultures, comparing the production of ethnographic writings with the act or process of translation. The book argues that contemporary ethnographers behave as cultural translators who interpret and confine foreign cultures outside their real context, converting them into palatable texts for readers in their target culture.


This work offers a thorough analysis of a corpus of texts written in Nahuatl during the colonial period, concentrating on phonetic, lexical, morphological and semantic aspects
resulting from linguistic contact phenomena between such distinct languages as Spanish and Nahuatl.


This book outlines the key themes in Carl Strehlow’s Die Aranda- und Loritja Stämme and relates it to the tradition of German anthropology which originated with Herder and developed in the U.S.A. through the work of Franz Boas.


An exploration of the work of Carl Strehlow and its context, and significance in Australian history. Veit argues that Strehlow’s works have virtually fallen into obscurity and that his contribution to science should be recognised.

**Related Topics**

Cultural translation, National Cultures, Translation and cultural development, historical approaches, translation in the development of religion and religious cultures, Translation and Religious encounters.
References


———. 2016. “Altjira, Dream and God.” In Religion and Non-Religion among Australian
Aboriginal peoples, edited by James L. Cox and Adam Possamai (eds), 85-108.
London: Routledge.

Australian mission ethnography.” In Strehlow Research Centre Occasional Papers
4, edited by Anna Kenny and Scott Mitchell, 26–53. Alice Springs: Northern
Territory Government.

letteratura.

de León Portilla and Miguel León Portilla. México: Universidad Nacional
Autónoma de México.

Ostler, Nicholas. 2004. “The social roots of missionary linguistics.” In Otto Zwartjes and
Even Hovdhaugen (eds.) Missionary Linguistics/Lingüística misionera: Selected papers
from the First International Conference on Missionary Linguistics, Oslo, 13–16 March

Pugach, Sara. 2012. Africa in translation: a history of colonial linguistics in Germany and

Ríos Castaño, Victoria. 2014a. Translation as Conquest: Sahagún and Universal History

———. 2014b. “Translation Purposes and Target Audiences in Sahagún’s Libro de la
Rethorica (c. 1577).” In Missionary Linguistics V/Lingüística misionera V:
Translation Theories and Practices, edited by Klaus Zimmermann, Otto Zwartjes


Language ideologies in Central Australia 1890-1910: Reflections of the German philosophy of language

David Moore

Introduction

There is a connection between the German philosophy of language and German missionary linguistics at Hermannsburg in the Northern Territory. This paper explores the tradition of the German philosophy of language, and the language ideologies which were inherited from the tradition. The period 1890-1910 saw the first comprehensive grammars and dictionaries of Central Australian Aboriginal languages. German Lutheran missionaries conducted linguistic research in the Dieri, (Diyari) language near Lake Eyre in South Australia and in the Aranda (Arrarnta, Arrernte) and Loritja (Luritja) languages at Hermannsburg in the Northern Territory.

A.H. Kempe (1844-1928) trained at the Hermannsburg mission institute in Lower Saxony and worked at Hermannsburg mission in Central Australia from 1877-1891. His successor Carl F. T. Strehlow (1871-1922) trained at the Neuendettelsau mission institute in Franconia and worked at Killalpannina (Lake Eyre) from 1892-4 and at Hermannsburg from 1894 until 1922. In writing about Strehlow’s major work Die Aranda-und Loritja-Stämme in Zentral-Australien (1907-20), Kenny (2013: 246), describes an ‘early German anthropological tradition’, concerned with particularism which emerged from the writings of Johann Gottfried Herder (1744-1803). Kenny (2013: 7) claims that ‘although Herder’s influence is not specific’ nevertheless ‘his interests and emphasis reflect a pattern typical of the German tradition.’ Sutton (2015) raises the question of the connection, ‘Although Kenny is skilled in showing how “[Strehlow’s] magnum opus mirrors in a striking way the anthropological concerns in the Germany of his time” (p. 70), and that he had

Affinities both with a nineteenth century German tradition, and with the anthropology that Boas would develop’ (p. 71), direct lines of transmission of such ideas to Strehlow remain largely obscure or, better, there were no
direct lines and the process was instead osmotic.

Gibson (2015: 636) seems to concur with Sutton’s opinion, writing that the relationship was ‘secondary and indirect’. The question of Herder’s influence on the Central Australian missionaries is explored in this chapter. What was the contribution of the eighteenth century German philosophical tradition to Australian linguistics? This question has been explored for North America, for example Hymes (1975: 21), who observes that anthropological linguistics is rooted in the German intellectual tradition. In this paper I will claim that the German philosophy of language was continued into Australian missionary linguistics through philology, translation and hermeneutics. Initially I will discuss the German philosophy of language tradition. Then I will identify specific language ideologies, showing how they are reflected in the work of the Central Australian missionaries. Finally, I will explain the fate of the tradition.

The inspiration for this paper was a chapter in Scholar and Sceptic (Sutton 1997) in which Peter Sutton discusses Aboriginal theories of language. Discussing the ‘scholarly dismissal of ‘native theories’, Sutton (1997: 223) concludes that ‘the world is only impoverished, assuming some kind of legitimacy for the intellectual enterprise of university-based disciplines, when ‘native theories’ are not taken seriously as analytic constructions of reality’. This view is shared by those who have recognised language ideologies as part of the study of linguistics, e.g. Kroskrity (2000). Sutton lists seven ‘classical social and philosophical principles’:

1. Languages are owned, not merely spoken. They are inherited property.
2. Languages belong to specific places, and to the people of those places.
3. Use of a particular language implies knowledge of and connectedness to a certain set of people and a certain part of the country. The direct implication always is: If you can speak my language you must be my relation (somehow).
4. Languages are like totems; they are ‘natural phenomena’ of mythic origin whose very distinctiveness and variety enhances their capacity to provide forms of identity for human groups. They are part of a group’s sacra, held collectively, but acquired by right individually. Like totems, they are relational symbols, connecting those who are different in a wider set of those who are the same, all having totems and languages. This variety itself is part of the common condition.

5. At the local level, however, such differences (as is the case with clan and patrilodge totems) are internal to society, not markers of the edges of different societies.

6. The ancestors moved about and spoke different languages, and this is how people still do or should live today. But in most cases, at least, these ancestral travels were regionally limited, not truly continental in scope. There is, in other words, a limit to how far one’s multilingualism can and should extend. Strangers are not those whose languages differ from one’s own, but those whose languages one does not know.

7. It is important, not accidental or trivial, that we speak different languages. It says something. It is something we intend. The heroic ancestors knew that cultural differences made for social complementarity, in a world where cultural sameness alone could not prevent deadly conflict. Otherness can level, as well as block, relations between people. There is no balance without complementarity. There is no complementarity without distinctions and differences.

These principles might be described as ‘language ideologies’ for speakers of Aboriginal languages. Rumsey (1990: 364) defines language ideologies as “shared bodies of commonsense notions about the nature of language in the world”. They are ideas or beliefs about language, reflecting the influence of social and political factors in language. They are held ‘not only by the immediate participants in a local sociolinguistic system but are also held by other observers, such as the linguists and ethnographers who have mapped the boundaries of languages and peoples
and provided descriptive accounts of them’ (Gal and Irvine 2000: 35). I now trace the connection between the German philosophy of language tradition and missionary linguists of Central Australia.

**The German philosophy of language tradition**

The distinctive philosophy of language in Germany arose from humanist concerns with the understanding of ancient societies authentically through their languages and literatures (Rowe 1965). Renaissance Humanism was adopted by the Lutheran Reformation. A connection between theology and language research descends from Luther and the Lutheran Reformation, and has been influential in missionary linguistics (Moore 2015: 41). The Lutheran Reformers expressed the principle that the language of worship should be clearly understood by the congregation, which ‘was a consequence of Luther’s valuing of the mother tongue’ (Wendt 2001: 8). Against the Council of Trent (1546) ‘the Reformers advanced the principles of perspicuity’ (Mueller-Vollmer 1985: 2) and advocated ‘the centrality of the word’ (Veit 1991: 124). Luther’s successor, the humanist Reformer Phillip Melanchthon established schools and universities which taught humanist philology, the understanding of ancient societies through the study of their languages and written records.

Michael Forster (2011: 254) explores the philosophy of language developed in Germany by JG Hamann (1730-1788) and JG Herder (1744-1803) and its extension into the nineteenth century. Hamann and Herder opposed the late eighteenth century view that reason, as the ‘mirror of thought’, existed independently of language (Marchand 1982: 24). Further, the ‘human capacities for language and for reasonableness are inseparably related’ (Hartmann and Schmidt 1971: 7). Herder thought that the best way to study a culture was through its language. Words are the keys to the thinking of a people (Marchand 1982: 26).

Herder outlined the basis for language research in his *Reflections on the philosophy of the history*
of mankind (Herder 1784-1791 [1968]) in which ‘the investigation into languages in their diversity promises to provide a reliable window into modes of thought’. Herder’s essay led to an intense interest in language research and translation, creating the foundations of the disciplines of cultural anthropology and linguistics. The foundation of modern linguistics was based upon principles taken over from the Hamann-Herder philosophical tradition, particularly what he designates as the ‘thought-language principle’ and the ‘language diversity principle’ (Forster 2011:264). Friedrich Schlegel (1772-1829) and Wilhelm von Humboldt (1767-1835) developed linguistics in the nineteenth century. Their work was based upon extensive experience in learning and translating languages. They investigated the grammars of diverse languages and ‘began the process of comparing grammars in an empirically careful way’ (Forster 2011: 265).

Schlegel’s major contribution was *On the language and wisdom of the Indians* (1808), which was based upon his studies of Sanskrit. Although early nineteenth century investigations considered the familiar literary languages, Humboldt was able to investigate language data from around two hundred different languages from around the world. His major contribution is *On the Diversity of Human Language Structure and its Influence on the Mental Development of Mankind* (Humboldt 1836), the introduction to his study of Kawi, the literary ancestor of the modern Javanese language of Indonesia. The Humboldtian tradition continued as a distillation of the essential aspects of the tradition, its key language ideologies.

**Language philosophy and missionary linguistics**

Forster (2011: 264) claims that the ‘seminal principles of the Herder-Hamann tradition would all go on to enjoy a vibrant afterlife in nineteenth-century philosophy of language’. There is a strong connection between the Hamann-Herder tradition and those of the mission institutes of the late nineteenth century through common language ideologies which continued into the next century.
Missionaries were trained in Humanist philology and translation at schools, missionary training institutes and Philological seminars closely associated with the Pietist and Neoconfessional movements in Lutheranism. Herder was grounded in Pietism, studied theology and worked as a Lutheran pastor. The town of Halle am Saale became an important centre of Pietism in the eighteenth century. The Francke Stiftung at Halle became a major force in missionary linguistics, sending Lutheran missionaries overseas in the 1700s and extending language research and Bible translation to non-European languages. The world’s first Bible society was established at Halle in 1710 for the translation, printing and distribution of Bibles in foreign languages. The Canstein Bible Society became the forerunner of other Bible societies such as the British and Foreign Bible Society, facilitating global cooperation between Protestant missionary translators from Germany and Britain.

Missionary teachers were in contact with the generation of language philosophers who succeeded Hamann and Herder. The Protestant theologian Friedrich Schleiermacher (1768-1834) further developed Herder’s insights in translation and hermeneutics as the science of interpretation. The founder of the Neuendettelsau mission institute Wilhelm Löhe (1808-1872) attended Schleiermacher’s lectures of during a year’s study in Berlin in 1828.

Friedrich Bauer (1812-1874) established humanist philology which he had learned through Lutheran institutions, in the curriculum of the Neuendettelsau missionary institute. He attended the Melanchthon school in Nürnberg which had been established in 1526 by Joachim Camerarius, the friend of Luther’s successor, the humanist Reformer Phillip Melanchthon. The Melanchthon School placed a strong emphasis on teaching the ancient languages of Hebrew, Greek and Latin. Bauer studied confessional Lutheran theology at Erlangen between 1830-32 and again between 1833-35. In the intervening period he studied at Halle with Friedrich Gesenius, the author of the Hebrew-German lexicon (Rossler 2013: 18).
Missiology, the theory of missions, adopted the linguistic ideologies of the 19th-century philosophers of language. Kenny (2013: 91) and Veit (1994: 146) mention that Strehlow may have been familiar with the teaching of Halle-based Protestant theologian Gustav Warneck (1834-1910). Strehlow’s close colleague Otto Siebert had read Warneck’s *Evangelische Missionslehre* (1892) in which he discussed the centrality of language for missions (Nobbs 2005: 44).

**Language ideologies: the centrality of language, meaning in language use and the diversity and complexity of languages**

The best way to understand the common inheritance from the German philosophical tradition is to examine the common language ideologies which are discernible in the writings of its successors. My analysis of what I describe as ‘language ideologies’ draws on the principles which Forster articulates in his two extensive works on Herder (Forster 2010; Forster 2011).

**Language ideology 1: Language and thought are inseparable therefore language is central to understanding**

Herder held the view that ‘thought is dependent upon and bounded by language’. In 1764 he wrote of the importance of the relationship in *Concerning Diligence in Several Learned languages* (cited in Forster 2010: 16). The missionaries realised that learning language was the key to understanding how people think because ‘one can only think in language and one can only think what one can express linguistically’. They acquired the language of their informants as the ‘first base’ for their investigations. Kempe (1880: 30) recognised the importance of learning the language for understanding:

> Wie es nun überall ist auf dem Missionsgebiet, namentlich unter den
Naturvölkern, so ist auch hier ein haupthinderniss, was erst hinweggeräumt werden muss, die Erlernung der Sprache.

‘As it is now all over the mission area, especially among the natural people, so here is also a major obstacle that must first be removed, the acquisition of the language.’

As many of their informants could not speak German or English, ‘every word must be translated to them if they are properly to understand it’ (Kempe 1891: 25). Language acquisition occurred rapidly the missionaries’ arrival at Hermannsburg as Kempe and his successor Carl Strehlow were taught the Aranda language by Moses Tjalkabota (Latz 2015: 31). Eylmann (1908: 81), writing about the late nineteenth century, recognised that:

Among the Europeans, there are only a very few people who can speak the Aboriginal languages correctly. Among those living in the inland, to my knowledge these are missionary Strehlow at Hermannsburg and those employed at the branch at Cooper’s Creek. Missionaries Reuther from Bethesda and Strehlow have translated the New Testament into Diāri in the nineties, and missionary Kempe, the earlier incumbent at Hermannsburg, compiled a small grammar of the Arünta language.

During the period when Lutheran missions were established in Central Australia the most influential linguist in Britain and the Australian colonies was a German, Max Müller (1823-1900) who closely followed the Hamann-Herder philosophy of language. In The Science of Thought (Müller 1887: ), he quotes Hamann as saying, ‘Language is not only the foundation of the whole faculty of thinking, but the’ central point also from which proceeds the misunderstanding of reason by herself. The Lutheran missionaries read Müller’s publications on Sprachwissenschaft or philology (Nobbs 2005: 29). This language ideology can be contrasted with one in which the assumption is that ‘monolingualism is the norm in society’ (Eades 2012: 474), a language ideology which is common in Anglophone societies. With a few exceptions such as the English anthropologist Arthur Maurice Hocart (1883-1939), few Anglophone anthropologists bothered to learn to speak other languages fluently. Their use of language was limited to making glossaries of key terms to support their theories (Wolfe 1991). It is doubtful that Baldwin Spencer learned a second language to any degree of proficiency (Moore 2016: 95). For example it is unlikely that
he could have gained a thorough knowledge of German, as Morphy (1996:147) reveals that ‘Spencer’s visits to Europe were rare’. Francis Gillen attempted to learn Aranda but without serious training, effort and support in learning it is unlikely that he would have learned to speak an Aboriginal language (J. Strehlow 2011: 694). Their lack of training and language proficiency were reinforced by language ideologies of monolingualism and the ethnocentric views of a colonial society. Nida (1954: 223) argues for the importance of positive attitudes to peoples and languages for language acquisition, ‘A superiority complex fortified by a paternalistic air is about the worst liability for effective language learning’.

**Language ideology 2:**

**Languages differ in form and meaning**

An important development in nineteenth century linguistics was the exploration of linguistic differences. Languages are rich systems of classification which are arbitrary and differ from each other (Duranti 1997: 26). The diversity of cultures in time and space is discoverable through the study of language. It was through the actual experience of translation that insight was gained into conceptual gulfs between source and target languages, leading to the realisation that “misunderstanding occurs as a matter of course and so understanding must be willed and sought at every point” (Forster 2010: 332). This ideology emerged in the late nineteenth century with the expansion of European colonies and the European encounter with numerous hitherto unknown languages as a strong counterpoint to the view that classical languages were more ‘correct’ than modern languages, a ‘deficit model’ which was often taught in ‘school grammar’. As Brown (1967: 99) suggests, the Renaissance grammarians based their theories on a familiarity with only a few languages, particularly Greek and Latin. The Hamann-Herder tradition brought ‘new knowledge about exotic languages and better knowledge of more familiar ones’ (Brown 1967:
Forster (2011: 3) writes of those in the tradition that ‘they all had an impressive knowledge, not only of their native German and other modern European languages, but also of ancient languages (for example, they all had good Latin, Greek, and Hebrew, and several of them also knew Sanskrit) and in some cases culturally distant living languages as well.’ Brown (1968: 117) claims of Humboldt that ‘his adherence to the ‘validity of universal grammar’ and his sympathy with the neo-Kantian grammarians waned progressively as he immersed himself more and more deeply in actual linguistic data.’

Missionary translation efforts led to the discovery of differences between languages and the incommensurability of terms. Kempe found that Aranda terms would not match their German equivalents: ‘Experience has shown that many of these natives can speak more or less English, but when questioned as to the meanings of words, they either are unable to answer, or else they give a wrong translation’ (1891: 25).

Carl Strehlow encountered language differences in his effort to translate the Dieri New Testament with J.G. Reuther. The Dieri New Testament was published in 1897. Strehlow could not find ‘words corresponding to will, desire, steadfastness or office’ (J. Strehlow 2011: 329). He found that ‘the Dieri language has no uniform word for ‘brother’ as neji meant specifically ‘older brother’ (ibid). The language had separate terms for ‘younger brother’ and ‘older brother’. While German has only one word for ‘we’, Dieri used distinct non-singular (dual and plural) pronouns for ‘we’ inclusive (speaker and addressee) and ‘we’ exclusive (the speaker and other(s) but not the addressee), a distinction made in some Australian languages (Blake 1987: 4) This was not found to be a ‘deficit model’ where an Aboriginal language lacked a category that existed in a European language, but rather the reverse. Strehlow’s experience in translating three Aboriginal languages (Dieri, Aranda and Loritja) strengthened an impression that Aboriginal languages are complex although different from European languages. Strehlow gained considerable experience in translation even before his arrival at the Hermannsburg mission in 1894.
Missionary research contrasts with that of the British Social Anthropologists. While Bronislaw Malinowski was undoubtedly a polyglot who could speak several languages, he was trained in natural sciences and had an inadequate theory of meaning in spite of his attempts to grasp ‘the native point of view’. That Malinowski ‘lacked the technical equipment for a competent description of a non-Indo-European language is shown by his ethnocentric comments, and his complete dependence upon Indo-European categories.’ (Henson 1974: 59).

**Language ideology 3**

**Meaning is understood through actual language use**

Given the differences between languages and the incommensurability of terms, language acquisition was seen to involve more than just a superficial grasp of the new language. It took many years, even decades, of training and research. This ideology went beyond the mere acknowledgement that being able to speak the language was important for research. Inductive research is necessary before accurate statements can be made about language. Kenny (2013: 5) discusses the aversion to theory from the German language tradition, ‘To achieve their Herderian goal, (i.e. to cover the various manifestations of cultures as completely as possible), German anthropologists were committed to inductive science and an empirical methodology’. The view of language complexity entails the need for detailed and comprehensive fieldwork, documentation and an inductive approach based upon actual language data. Thorough documentation involved the collection of texts and their detailed analysis. Missionaries were able to write letters in Aranda. The wives of missionaries also learned Aboriginal languages (J. Strehlow 2011: 543), for example, Frieda Strehlow, for example, was able to speak, read and write Aranda.

For Müller and the missionaries, language was integral to their work and a people could only be
understood through an adequate understanding of their language. It was common for misconceptions to be held until adequate data was obtained about the language and culture of a people. Prior to the intensive study of the Sanskrit language from the early nineteenth century, misinformation about ancient India was frequently encountered in Europe. As Müller (1892: 216) urged, ‘let us wait till we know at least their language, for otherwise we may go hopelessly wrong’. In opposition to contemporary ethnologists, Müller recommended that language data be collected from unwritten languages and valued as highly as European languages. For Müller (1898: 152) it was necessary to establish the principle that:

No one is in future to be quoted as an authority on the customs, traditions, and more particularly, on the religious ideas of uncivilised races, who has not acquired an acquaintance with their language, sufficient to enable him to converse with them freely on these difficult subjects.

Crick observed that he refused to use evidence from those who could not speak the relevant languages (Crick 1972: 7).

Recognising the difficulty of the task of recording and analysing languages and the need to do it well, the Central Australian missionaries sought help and collaboration with linguists. For example, Kempe (1891: 25) appealed for assistance, ‘There are many expressions related herein which would require a philologist to classify or properly arrange, and any hints in this direction would be thankfully received by the writer.’ Franz Nikolaus Finck (1867-1910), a linguist in the Humboldtian tradition advised on Carl Strehlow’s Aranda and Loritja grammar. Finck also trained the American linguist and fieldworker John Peabody Harrington (1884-1961) who was to undertake extensive language documentation in the USA.

By contrast Anglophone fieldworkers such as Baldwin Spencer and Francis Gillen had very limited training in language-related disciplines. Gillen wrote to Spencer, ‘I am going to seriously attempt learning the language but before starting to work I am going to furbish up my long forgotten grammar’ (Mulvaney et al 1997: 213). In 1898 Gillen attempted to learn how to analyse
English grammar through *Corr’s Rational Grammar* (Corr 1897). This textbook appears to have been an attempt to apply logic to grammar and sentence construction. The text would have been of limited value for understanding Aboriginal languages and Gillen admitted that he was ‘far from confident about being successful’ in gaining an adequate understanding of grammar.

Spencer and Gillen believed that they could pursue the study of cultures without a nuanced knowledge of language to gain an Aranda perspective. The failure of the monolingual researchers is starkest with the interpretation of Aboriginal songlines. Spencer and Gillen (1904: xiv) described the singers as ‘naked, howling savages’ and that ‘they are chanting songs of which they do not know the meaning’. In contrast, the missionaries were able to translate the complex language of songlines after becoming fluent in Central Australian languages and gaining experience in translating ordinary language.

**Language ideology 4**

**Languages are complex**

The German philosophy of language tradition was concerned to combat evolutionary views and the view that some cultures and languages were ‘primitive’, arguing that the languages were not only complex but also had features that were lacking in the European languages. In the view of Griffiths (1996: 15) ‘Social Darwinism provided a rationale for British Imperialism’.

Evolutionary theory and the notion of progress merged into a powerful belief in ‘social progress’ which justified the elimination or domination of indigenous societies. The Aborigines were seen as a biological relic which became the basis for a scientific racism.

In his major work *Primitive Culture*, Tylor (1871: 237) claimed that ‘The self-expressive branch of savage language affords valuable materials for the problem of primitive speech’. Tylor’s theory that the investigation of the ‘savage’ could lead to a better understanding of the ‘primitive’
informed the Central Australian anthropological fieldworkers Spencer and Gillen. Henson (1974:9) summarizes the attitude of the era, ‘the ethnocentric approach to language was common to almost all the anthropologists of the period, and it was largely this that prevented them from recognising that there is no such thing as a ‘primitive’ language’ (Hill 1952: 177).

One of the most influential thinkers of the twentieth century who was ‘steeped in Social Darwinism’ was Otto Jespersen (1860-1943) (Errington 2008:130). Jespersen (1924: 429) for example claimed that, ‘the aborigines of Tasmania had no words representing abstract ideas’. Aranda appears to have been the language most frequently identified as a ‘primitive language’. Notions of ‘primitive languages’ endured into the twentieth century, for example, the Norwegian linguist Alf Sommerfelt discussed them in a book that he wrote about Aranda. Sommerfelt (1938: 189) claimed that “The Aranta do not know real grammatical categories comparable to those of more developed languages.”

Capell (1939: 108) dismissed this claim as ‘analysis within the language carried to breaking point.’ Rigsby (1976: 30) mentions that it was Joshua Whatmough (1956: 53) who asserted that ‘Aranta structure is much less elaborate than that of the simplest of the Indo-European languages’.

Missionaries in Central Australia were critical of the notion of ‘primitive languages’. They collected data which was verified by long experience, unlike many of their contemporaries who failed to grasp the complexities of Aboriginal languages in their brief forays into the field. Kempe aimed to convey the complexity of Aranda through his 1891 grammar showing how many inflectional forms could be made from Aranda verbs (Kempe 1891: 25) Strehlow appears not to have used the term ‘primitive’ of Aboriginal people (Veit 1991: 128). Rather, he prefixed the relevant concepts with ‘Ur-‘original’, for example Urvolk ‘original people.’ Strehlow stressed that Aranda was an ancient language which was complex and sophisticated. His letter to the Adelaide Register (Strehlow 1921) praised the complexity of the Aranda language as shown by
the large number of grammatical categories:

The derivations and compounds are quite marvellous. Then the great number of words! It is difficult to count them on account of the number of derivations and dialectical forms, but the latter included, I estimate that the Aranda language possesses not less than 6000 words.

In nineteenth century Germany through the influence of ‘Philhellenism’, Greek was praised as a language of cultivation. In Strehlow’s view it therefore had more categories of mood than the old Greek language.

**Conclusion: The fate of the tradition**

Schools of thought emanating from the German language philosophers and conveyed to missionary linguistics and anthropology through humanist philology in Germany in the nineteenth century inherited a distinct set of language ideologies. These are clearly discernible in the writings of Hamann, Herder and those who built upon the foundations that they laid. Why was the tradition sidelined in Australian anthropological fieldwork? The main reason was the effect of a British anthropology that excluded language from its central concerns. The growth of the natural sciences around the turn of the twentieth century led to scientism with an interest in visual ‘observation’ rather than in listening to language speakers, and the recording of texts and translation. Müller’s work was sidelined. Crick (1976: 15) shows that there had been an interest in language as a result of orientalism, but the ‘Victorian ethnologists took little notice of Müller’s work, and British anthropology grew after his death with even fewer relationships with language than existed during his lifetime’. In North America, under the founding influence of Franz Boas, language was treated as an integral aspect of the study of culture. Henson (1974: 119) claimed that ‘in the period from about 1920 until 1960 British Social Anthropologists paid no serious attention to language’ and had little contact with American linguistic anthropologists.

Unfortunately, Australian anthropology followed trends from Britain, including the Social
Anthropology of Malinowski and Radcliffe-Brown. The German philosophy of language was ignored. The English translation of Strehlow’s *Die Aranda* wasn’t published and most Australians could not read German (Barth et al 2005: 137). Furthermore, two world wars led to estrangement between Germans and Britons. The German tradition is worth investigating further, given its depth, vitality and outstanding contribution to the understanding of Aboriginal languages and societies.

**References**


Gipper H., & Schmitter, P. (1979). *Sprachwissenschaft und Sprachphilosophie im*


Humboldt, Wilhelm von (1836) On the Diversity of Human Language Structure and its Influence on the Mental Development of Mankind


Kempe, A.H. Bericht von Missionar Kempe Hermannsburger Missionsblatt 1880, August, number 8, Die Mission in Central Australien.


The formation of Central Australian missionary linguists

David Moore

1 Introduction

The contribution of missionaries to linguistics has been immense, as Richard Lepsius (1861: 1) observed:

‘An intimate relation exists between linguistic science and Missionary labours. The latter, especially in new and hitherto unwritten languages, supply the former - chiefly by means of translations. Vocabularies, Grammars and Specimens - with rich, and in some cases the only, materials for further investigation and comparison’.

The purpose of this paper is to outline the theoretical sources of the missionary linguistics which developed in Germany in the nineteenth century and forms the background to the description of Central Australian languages in the late nineteenth century and early twentieth centuries by missionaries who were trained at the mission institutes at Hermannsburg and Neuendettelsau.

Linguistics became a German discipline, one of the great achievements of the growth of sciences and humanities in nineteenth century Germany. I argue that a text-based philology which may be called ‘general linguistics’ was more significant for missionary linguistics than the positivism of the Neogrammarians which focused narrowly upon the discovery of sound correspondences in Indo-European languages.

Hermannsburg mission station in the Northern Territory was founded in 1877 by missionaries from Hermannsburg in Lower Saxony in Germany. The practical training of missionaries Hermann Kempe, Wilhelm Schwarz and Louis Schulze was vital for the
initial establishment of the mission station. They were succeeded by Carl Strehlow (1871-1922) who trained at the Neuendettelsau mission institute in Franconia in Bavaria. The Neuendettelsau missionaries had more intensive training in language than their Hermannsburg missionary predecessors which is evident from the depth and coverage of their language research in Central Australia. For this reason, I intend to focus upon the background to the missionary linguistics which was taught at the Neuendettelsau mission institute in the late nineteenth century.

1.1 Humanists: Returning to the Sources Ad Fontes

Philology is oriented to literature and texts, developing with the need to understand classical texts and following from the sixteenth century humanists, with their motto of ad fontes ‘back to the sources’ and the study of ancient languages. The humanist concern was for engagement with the classical source texts and with understanding the humans who created them. Humanists attempted to return to the literary Latin language of the Roman authors Cicero, Caesar, Sallust, Livy, and Quintilian which were regarded as the original and most ‘correct’ sources of Latin.

Two notable humanist scholars need to be mentioned. First, Johann Reuchlin (1455-1522) compiled his “De Rudimentis hebraicis” or Rudmentia in 1506 (Posset 2015). Until the sixteenth century, Hebrew was hardly known to scholars in Europe and Hebrew books were scarce. The Rudmentia contained information about sounds and letters, a dictionary and grammar with the parts of speech of the Hebrew language (Arens 1955: 50). Reuchlin ‘drew the attention of Western scholars to the radically different word class system in use by native Hebrew grammarians; noun, verb and particle’ (Robins 1990: 110). Second,
another key humanist scholar was Desiderius Erasmus (1436-1536) who devised the 

1.2 Lutheran Reformers

The Reformation led to the institutionalization of the humanist language study in Germany (Kittelson 1985: 98). While there were disagreements between the humanists and the Lutheran Reformers over the extent to which the medieval church should be reformed, they agreed about the need to return to the earliest sources, the Hebrew and Greek languages through ‘sacred philology’. Martin Luther changed attitudes to the ancient languages, to translation theory and the use of the vernacular German in the development of two critical documents of the Reformation: the monumental Luther Bible and the Small Catechism. As a result of these developments, those who studied theology in Germany in the nineteenth century were grounded in the biblical languages and theology dominated language research (Raumer 1870: 3).

1.2.1 Lutheran education

The humanist Phillip Melanchthon (1497-1560), Luther’s successor and the ‘preceptor of Germany’ was a key figure in the development of humanist education in Germany. Melanchthon founded German universities and reformed others. He founded ‘Gymnasia’ which taught a humanist curriculum of classical languages. The Melanchthon Gymnasium in Nürnberg was established in 1526 by Melanchthon’s friend and fellow humanist Joachim Camerarius (1500-1574) and was attended by the founders of the Neuendettelsau Mission Institute. Education was a strong concern of Australian Lutherans with schools often built alongside church buildings. This pattern was replicated in the remote mission stations at Lake Killalpaninna and Hermannsburg.
1.2.2 Missions

Protestant missions were established in the early 1700s with August Hermann Francke of the Danish-Halle mission sending missionaries to India (Vorländer 2014: 15). The Moravians (Herrnhuter) sent missionaries to the West Indies in 1832. In the early 1800s Lutherans supported the Basel Mission. Later, specifically Lutheran missions were established such as the Hermannsburg and Neuendettelsau missions. These mission societies are discussed in more depth in §4. Bible Societies went ‘hand in hand’ with missions, for example the Central Bibelverein which was established in Bavaria in 1824 (Vorländer 2013: 267). They were founded in order to translate, publish and distribute bibles. The first Bible Society in the world was the Canstein Bible Society, established at Halle in 1710. The British and Foreign Bible Society, which was founded in 1804, published Bibles in Aboriginal languages. The first translation New Testament into an Aboriginal language to be published was Dieri, published by the Bible Society in 1897 (Capell 1971: 668)\(^{21}\) and the Aranda New Testament in 1956 (Capell 1971: 676) which was largely based upon the translation work of Carl Strehlow from 1913-19.

2 Philology

During the reaction to the Enlightenment of the late eighteenth century there was a search for models of society which were radically different from the French model and the Latin schools which had dominated German education. Humanist philology was encouraged by the philosophy of language of the late eighteenth century espoused by JG Hamann (1730-1788) and JG Herder (1744-1803), for which reflections can be found in distinct language ideologies in succeeding centuries (Moore, forthcoming).

\(^{21}\) Capell has ‘1896’.
2.1.1 Translation

The foundation of language comparison and comparative linguistics was translation from one language to another. Luther was not interested in linguistic philosophy for its own sake, but ‘first and foremost a theological translator, for whom translating God’s word is a religious act’ (Wells 1985: 203). Luther’s goal was to translate the Bible from the original source languages of Hebrew and Greek into idiomatic German. The ancient languages were ‘not intrinsically sacred’ but means for better understanding the original authors of the Bible. He sought to make the Bible sound authentically German through the process of Verdeutschung or what came to be called a ‘domesticating’ approach to translation. Johann Gottfried Herder (1744-1803) came to have different views about translation, urging the need to ‘foreignize’ rather than to ‘domesticate’, in order to emphasise the differences between the source and target texts (Forster 2010: 396)\(^2\). Following Herder, Friedrich Schleiermacher (1768-1834) also favoured a ‘foreignizing’ approach to translation (Schleiermacher 2012 [1813]: 53). Translation theory was important for missionary training institutes which were concerned with the translation of the Bible into previously unknown and unrecorded languages.

2.1.2 Textual scholarship

The roots of philology lie within textual scholarship, the study of the classical literary and biblical languages Latin, Greek and Hebrew which were studied during the Reformation. Textual scholarship and the tools for understanding the ancient languages developed at this time, the products of humanist scholarship and assisted the process of translation and interpretation of texts. In 1825 Karl Lachmann (1793-1851) became professor of

\(^{2}\) Although emphasising the differences in approaches to translation between Luther and Herder, Forster goes on to say that ‘his general estimation of Luther is extremely high, and he was, after all, a Lutheran minister!’.
classical and Germanic philology at the University of Berlin. Lachmann aimed to determine the earliest form of the biblical text and to restore the original text (Sandys 1915: 336). He produced scholarly editions with a rigorous editorial method which became influential in Greek, Latin and German philology (Raumer 1870: 457; Kontje 2007: 113). Comparative linguistics adopted the methods of text comparison which had been devised for textual criticism (Lehmann 1993: 32). The allied disciplines of translation theory, bilingual lexicography and textual criticism aided the processes of translating and interpreting texts.

2.1.3 Bilingual Lexicography

Bilingual dictionaries of the biblical languages would certainly have been familiar to students in the missionary training institutions. Modern approaches to lexicography originated in Germany in the nineteenth century with monumental works which had been devised by German scholars as a continuation of the humanist lexicographic research of the sixteenth century and a ‘lexicographic revolution’ with the making of dictionaries in European languages in the late eighteenth century (Anderson 2006: 71). For the first time bilingual dictionaries were created in which words from the classical languages were defined in the vernacular languages of Europe, rather being defined with Latin. Friedrich (Wilhelm) Gesenius (1786-1842), was a German orientalist and Biblical scholar who taught at Halle and foremost among Semitist scholars in Germany (Arens 1955: 207). In 1834 Gesenius published the *Hebräisches und Chaldäisches Handwörterbuch über das Alte Testament*, (A Hebrew and Chaldean wordbook of the Old Testament), a ground-breaking grammar and dictionary of the Hebrew language in the German language (Rössler 2013: 18). (See Figure 1).
The Gesenius works offered etymology, notes on inflections and spellings, ample references to the Bible text for the different meanings given, and suggestions for emendation. They include all proper names, with identifications and references, as well as notes on their meaning. There were also several English editions, the last one was revised by F. Brown, S.R. Driver, and C.A. Briggs (Oxford 1907). Later editions effectively became an independent work. The dictionary remained in use among biblical scholars throughout much of the twentieth century (Rabin 1970: 314).

Figure 1: Entry for ‘Babel’ from Gesenius’ Hebrew-German dictionary.

Another significant language for bilingual lexicography was Greek. Franz Passow (1786-1833) was a German classical scholar and lexicographer at Breslau who had a significant influence on lexicography. Passow’s dictionary contributed to the theoretical basis of the Oxford English dictionary. In 1812 he published a groundbreaking essay Über zweck, anlage und ergänzung griechischer wörterbücher (On the purpose, design and supplementation of Greek dictionaries), a brief paper commenting on the deficiencies of his predecessor Johann Gottlob Schneider’s Griechisch-Deutsches Wörterbuch (1797-1798). Passow (1831: 27) put these principles into practice in his own Greek-German dictionary in which he explained the principles of lexicography which he had devised:
Das Wörterbuch soll die Lebensgeschichte jedes einzelnen Wortes in bequem geordneter Übersichtlichkeit entwerfen.

The Dictionary should be designed as the life story of each word arranged in a convenient orderly way.

It would provide information on the first place in which the word was recorded, how the word had changed and when the word’s use was discontinued in the language. Examples in Passow’s dictionary were drawn from Greek literature. It became the basis for the Liddell-Scott Greek-English lexicon of 1843 which was a translation of Passow’s dictionary and was only published without his name in 1855 after Liddell and Scott felt that substantial changes had been made in their work and that they were no longer obliged to acknowledge Passow (Lee 2014: 355).

Aarsleff (1967: 254) lists three lexicographic innovations in Passow’s essay. First, Passow limited the kinds of entries which should appear in a dictionary. All geographical, mythological and historical words had no place in the dictionary (Passow 1812: 21). Second, he always cited the authorities for each entry. Third, there was a chronological ordering within the entry meaning that the earliest example on record would be the first example of the word (Passow 1812: 32). Figure 2 shows the entry for the Greek word arête, which is often translated as ‘excellence’.

![Figure 2: The entry for arête in Passow’s Dictionary.](image)

The English Liddell-Scott version of 1870 has:

‘Goodness, excellence of any kind, but in Homer especially manly warlike goodness, manhood, prowess, valour’.
Missionary candidates studying ancient languages in the nineteenth century learned about bilingual lexicography through the dictionaries that were made by Gesenius, Passow and their successors.

2.1.4 Orientalist philology
Orientalist philology studied the languages of the Near East and the Far East. Initially this applied to the Hebrew and Aramaic, the ancient ‘Near-Eastern’ languages of the Bible. The ancient Indo-European language Sanskrit, related to Greek and Latin, became important in the development of comparative philology and phonetics. Descriptions of Sanskrit began to emerge in the early years of the nineteenth century. The Hitopadesia (Hitopadesha) was the first book printed in the Nagari script, published by the British missionary and translator William Carey (1761-1834) at Serampore, India in 1803. As poets and philosophers became convinced that human civilization had begun in India (Kontje 2004: 65), Sanskrit replaced Hebrew as the ‘original language’ of humanity. Scholarly interest in Sanskrit spread. Humboldt encouraged the development of chairs of Sanskrit in the German universities. The orientalist and translator Friedrich Rückert (1788-1866) taught Tamil at Erlangen (Kneebone 2005: 359). Luise Homann learned Indian languages and eventually went to work for the Dresden Mission Society at the Bethesda Mission in South Australia.

Sanskrit was not only a new source of linguistic data for language comparison but also a new tradition of linguistic description to be explored. The value of the Sanskrit grammatical tradition was highlighted by Raumer, ‘the Indian grammarians are incomparably more accurate, more comprehensible and more explicit in their definition of sounds than the Greeks, who are in their own way also quite discriminating’ (cited in Lehmann 1967: 76). Sanskrit phonetic analysis influenced Western linguistics (Allen 1953: 3). Phonetic statements appear to be the most accessible part of the linguistic
description of the Sanskrit grammarians such as Panini. Those who read their phonetic writings, for example, (Raumer 1863) had a greater phonetic awareness of for example, the difference between voiced and unvoiced consonants.

2.2  The establishment of philological departments

A renewed focus or revival of classical philology was a feature of the nineteenth century (Raumer 1870: 4). Linguists ‘devoted themselves almost entirely to the study of languages of the past’ (Lehmann 1993: 9). Greek emerged as a key language of the philological departments (‘Seminars’) alongside Latin. Philology emerged as the model science for the research university: ‘critical, inquisitive and grounded in an expert command of the Greek language’ (Williamson 2004: 136). Classical humanism was established in German universities and taught at all levels of education. Scholars were thoroughly at home in the classical languages and had compiled comprehensive grammars and dictionaries of ancient languages. Thorough descriptions of Latin, Hebrew, Greek and Sanskrit were made and later, on the pattern of these descriptions grammars of other languages were produced. German scholars regarded Greek as the language of perfection and encouraged the teaching of Greek in the gymnasiums or high schools. Access to the Greek mind was to proceed by ‘strict attention to the linguistic, grammatical and orthographic detail’ (Marchand 2003: 20). The learning of Greek was important to Bildung as ‘formation’ or ‘cultivation’.

2.2.1  Göttingen

In Protestant Germany, philology as the study of written texts became established at the University of Göttingen in the late eighteenth century. The latter had become one of the premier literary and academic centres of Europe by 1785 (Leventhal 1986: 244). In the years following its development as a recognized European academic centre, similar
philological departments were established in the German-speaking territories, at Halle (1787); Helmstedt (1779) and Berlin (1809).

2.2.2 Erlangen

From its foundation in 1742 the University of Erlangen in Franconia (Bavaria) was a Protestant institution. Erlangen was deeply conservative and confessionalist, rejecting the rationalism of the Enlightenment (Pugach 2012: 72). Philology was closely connected with theology. Erlangen theologians taught that ‘the idea of experience, in particular the experience of sin and rebirth in Christ, was central to Protestantism’ (ibid). In 1777 Gottlieb Christoph Harleß, a classical scholar and bibliographer founded a philological department at the University of Erlangen which was supported by early to mid-nineteenth century Erlangen theologians such as Adolf Harleß (1806-1879), Johann CK Hofmann (1810-1877) and Gottfried Thomasius (1802-1875). Carl Friedrich Naegelsbach (1806-1859) a Classical philologist was a Professor of philology and co-director of the Philological department at Erlangen from 1842-1859. He wrote Lateinsiche Stilistik and Homerische Theologie (Bursian 1883: 715). There was a connection between Neuendettelsau Missionary institute and the University of Erlangen. Friedrich Bauer, the founder of the Neuendettelsau mission curriculum studied at Erlangen when the disciplines of philology, in its classical and orientalist forms, was at its zenith.

2.3 Germanic language research

The development of a Schriftdeutsch or common written German language was one of the most important consequences of the Reformation in Germany. The use of the vernacular for Lutheran worship and the Bible in the sixteenth century led to the rise of Germanic philology, and the intense study of Germanic languages in the nineteenth century and ‘had a many-faceted influence on the foundation and development of Germanic philology’ (Raumer 1870: 31). The study of German had formerly been in a marginal
position (Fuchshuber-Weiss 2013: 82). In the opinion of Pedersen (1931: 37), ‘the chief undertaking of the nineteenth century was the scholarly treatment of the older Germanic languages, which previously had scarcely begun’. However there was a new interest in Germanic languages and a number of linguists began to research Germanic languages in the nineteenth century and ‘renewing Herder’s faith in the voice of the people, Arnim, Brentano, Görres and the Brothers Grimm began to collect and publish German sagas, fairy tales, and Volkslieder’ (Kontje 2004: 111). German was used increasingly as the language of instruction instead of Latin. German emerged as a standard language and there were moves towards spelling reform and further standardization of the language. In the nineteenth century the most intensive study of the German language was undertaken with the production of grammars and dictionaries as part of the standardisation of the language (Raumer 1870: 3). Comparative philology resulted from the discovery of the relatedness of the languages within the Indo-European group which eventually led to research into living languages including German dialects. The new study of the Germanic languages had a profound influence on comparative linguistics. Rasmus Rask (1787-1832) wrote the first systematic grammars of Old Norse and Old English (Robins 1990: 188). Rask started the systematic comparison of word forms between different languages, matching a sound in one language to a sound in another language for a number of different words.

2.3.1 Grimm

Jacob Grimm (1785-1863) was appointed professor and librarian at Göttingen in 1817 and remained there until 1837. He was also involved in spelling reform and lexicography. The Grimm Wörterbuch dictionary aimed to cover a three hundred year period of the German language which began with Luther and closed with Goethe (Raumer 1858: 331). He wrote his Deutsche Grammatik (Germanic Grammar) which laid the foundation for
the comparison of the Germanic languages. Grimm’s *Grammatik* is a comparison of fifteen languages. Grimm was primarily concerned with comparing the consonant sounds of languages as the consonants were less changeable and could more easily be compared than the vowels. He was able to ‘account consistently for a large segment of the set of Indo-European and Germanic consonants’ (*ibid.*). It was Grimm’s conception of the sound shift as a systematic process which made such an impact on linguistics (Lehmann 1967: 46).

The changes in the consonants as identified by Jakob Grimm (1822: 584) are shown in Table 1.

<table>
<thead>
<tr>
<th>Greek</th>
<th>P</th>
<th>B</th>
<th>F</th>
<th>T</th>
<th>D</th>
<th>Th</th>
<th>K</th>
<th>G</th>
<th>Ch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gothic</td>
<td>F</td>
<td>P</td>
<td>B</td>
<td>Th</td>
<td>T</td>
<td>D</td>
<td>Ch</td>
<td>K</td>
<td>G</td>
</tr>
<tr>
<td>OHG</td>
<td>B</td>
<td>F</td>
<td>P</td>
<td>D</td>
<td>Th</td>
<td>T</td>
<td>G</td>
<td>Ch</td>
<td>K</td>
</tr>
</tbody>
</table>

Table 1: Sound changes in Grimm 1822.

The three languages being compared were

**Indo-European**, Proto-Germanic (Greek),

**Proto-Germanic**, Gothic

**Germanic**, Old High German (OHG).

Grimm distinguished three places of articulation and three types of release. These were:

**Tenuis** (p, t, k),

**Aspirates** (f, th, ch)

**Mediae** (b, d, g).
The pattern identified by Grimm was that the Indo-European Tenuis became Germanic aspirates (Streitberg et al. 1927-36: 264). Proto-germanic aspirates became Germanic mediae. Proto-germanic Media became Germanic Tenuis. For the next half century it was Raumer, Grassmann and Verner who attempted to clarify the exceptions to Grimm’s formulation of the historical sound changes (Lehmann 1967: 47). The solution to the exceptions to Grimm’s formulation prompted Raumer and other linguists of the time to concern themselves further with phonetics’ (Lehmann 1993: 9).

2.3.2 Raumer and phonetics

Rudolf von Raumer (1815-1876) was a philologist at the University of Erlangen from 1840 and Professor there until his death. His particular interest was in the Germanic languages, following on from the work of Grimm.

The great advance in historical linguistics after the early publications of Grimm, Bopp and others was in knowledge of phonetics (Lehmann 1967: 67). Raumer published the treatise Aspiration und die Lautverschiebung (Aspiration and the sound-shift) in 1837. He dedicated himself to the elucidation of Grimm’s formulation of the sound shift (Arens 1955: 206). Raumer realised the need to take Grimm’s work further, making various contributions and refinements (Raumer 1863: 406). Grimm’s treatment was of ‘letters’ rather than ‘sounds’ (Robins 1990: 189). He used the term Buchstaben ‘letters’ as corresponding to the use of Latin littera by earlier Latin grammarians (Wells 1985: 71).

Grimm classified aspirates and spirants (fricatives) together and this confusion was a weak point in his analysis. The shift occurred with aspirates, not spirants, as there was Germanic ‘f’ and ‘x’ (h) in High German. When Grimm in his table had Old High German ‘b’ and ‘g’ as representing Germanic ‘f’ and X (h) so this was founded on the interchange between the aspirates and the spirants. Raumer succeeded in showing that the aspirates were actually aspirated stop consonants. Raumer claimed that ‘the Germanic
languages of the Gothic stage have a tenuis (p,t,k) in place of a Greek media (b,d,g), and in place of a Greek tenuis, an aspirata (f, th, ch) and finally in place of Greek aspirate, they have a media (Lehmann 1967: 78). Raumer recognised that the real spirants were *Reibelauten* (fricatives). He described the difference: ‘the main difference between aspirates and spirants was found to be, that the aspirate was stop (explosiva) with after sounding, while the spirant is a continual sound (continua) produced not through the closure, but rather through the mere constricting of the speech organs’ (cited in Lehmann 1967: 78). Raumer used the work of the Sanskrit grammarians to establish that the sounds were originally aspirates and not spirants. There was clearly a relationship between the unaspirated stops and aspirated stops which showed up in the similarity of the Devanagari letters which were used to represent them.

The correct identification of the aspirated sounds was necessary for historical linguistics and ‘phonetics in the service of language history’ (Streitberg 1927-36: 265). Raumer was the first to realise that it wasn’t enough to find the transformations of the letters, but to understand them (Arens 1955: 252). It was an influential paper (Benfey 1869: 583).

Raumer is credited with discovering the law that was later named Grassmann’s law (Collinge 1985: 47; Streitberg 1927-36: 283). Briefly stated, Grassman’s law is that ‘aspiration nevers occurs in two successive consonants’ (Lehmann 1967: 67). If an aspirated consonant is followed by another aspirated consonant, then the first consonant loses the aspiration. Raumer (1863: 75) declares that, ‘the Sanskrit doesn’t have two aspirated consonants one behind the other, so it is possible as the original form *budh* (3rd singular of *bodhati*), even accepting *bhudh*.’ With other words, there is only an apparent exception from the regular change. Raumer only showed that it worked in Sanskrit and not Greek. He had ‘stated it so briefly that it remained without impact’ (Lehmann 1967: 110).
Raumer (1857:366) argues that it is important to collect information about the speaker, their social class, age and manner. He studied contemporary speech for understanding historical sound relationships, researching the spoken dialects of spoken German: Low German, Bavarian and Swabian. Raumer wrote to Georg Frommann, the editor of the Zeitschrift für die deutschen Mundarten (Journal for German dialects) that his ultimate goal was that he was determined to keep historical reality in the strictest sense of the word in mind. The understanding of the history of languages could be facilitated by carrying out linguistic research into German dialects. This demonstrates Raumer’s awareness of German dialects and his use of synchronic data from dialects to understand phonetic changes in Germanic languages (Oertel 1901: 33).

Raumer stressed the importance of the individual speaker. Rather than discussing the ‘spirit of the language’ Raumer said ‘rather that all changes in language are actually produced by the people” (Lehmann 1967: 73). Raumer (1863: 102) applied his theory to language instruction in Der Unterricht im Deutschen ‘Instruction in German’:

The idea is right that the teaching in the elementary school has to start from the spoken dialect. The dialect spoken is the real mother tongue of the student who grew up with it and it is the original organ of his thoughts and feelings. It is therefore the task of the elementary school be the student, insofar as it is ever to take part in the written language, to lead over from his dialect to literary language.

2.3.3 German orthography

Raumer’s theoretical work inspired the orthography conference called by Falk, the Prussian minister of Education in Berlin in 1876, calling for a national orthography, only five years after the German Empire had been founded (Hatherall 1976: 88). Raumer was asked to convene the conference and played a critical role in the development of the national German orthography (Benfey 1869; Matthias 1907). Two directions emerged in the conflict over the orthography (Drosdowski 1996: 11). The Grimm school taught the principle of ‘write according to the historical development of the High German’. Raumer
was acutely aware of the differences between written and spoken language, writing of the
‘strict division between writing and sound’ (Raumer 1863: 412). He recognised the
priority of the spoken language and aimed to reform the German orthography to represent
speech accurately according to the principle *Schreib wie du sprichst* ‘Write as you speak’.

Raumer published his *Rechtschreibung* (orthography) in 1858 (Raumer 1863). His
recommendations for spelling reform were partially implemented by the Prussian
government. Duden (1872) cited Raumer’s paper *Das Prinzip der deutschen
Rechtschreibung* ‘The Principle of German Orthography’ (Raumer 1863: 138) that an
orthography which all of Germany could agree upon would be preferable to which one
which remained limited to a part of Germany and caused division.

Raumer had ‘an aloof position’ and was somewhat isolated, as Erlangen wasn’t at the
centre of developments in linguistics after the centre of gravity had shifted to Leipzig
(Lehmann 1967: 68). Raumer was one of the pioneers of phonetics23 with a methodical
and scientific approach to sounds. Lehmann (1967: 68) considers him ‘to be one of the
most important contributors to the methodology of historical linguistics’. The problems
which arose in historical linguistics led to an increasing need for competence in
phonetics. In the view of Jankowsky (1972: 89) ‘In keeping with this need to move away
from the shuffling of letters, von Raumer set out to arrive at an accurate statement of
articulatory phonetics’, and credits him as being ‘the first to utilize the implications of
phonetic studies for letter-philology’. Raumer is ‘a representative of a transitional stage
from historical comparativism to neogrammarian positivism’ (Schmidt-Regener 1996). In
the 1850s he was the first linguist to emphasize the need to describe and codify the

23 Von Raumer 1870 is a major work in the history of Germanic language research. Raumer claimed to use
the bibliographical data of Heinrich Hoffman.
contemporary language, thus taking a position clearly different from the dominant paradigm of his time. There can be no doubt that Raumer had a critical role in the development of linguistic research.

2.3.4 Grammar: Friedrich Bauer and the Grammar of modern High German.

Friedrich Bauer (1812-1874), was a Germanist and educator who devised the curriculum for the Neuendettelsau Mission Institute. He was a confessional Lutheran and received a humanist training at the Melanchthon Gymnasium in Nürnberg. Bauer studied at Erlangen in 1830-32, at Halle in 1832-33 and again at Erlangen in 1833-5. At Halle he studied with Gesenius, the author of the Hebrew-German lexicon (Rössler 2013: 18). Bauer taught the German language at the Nürnberg trade school during 1845-6. He realised that a grammar of standard High German language was needed to teach the German language to his students who were aged between the ages of twelve and twenty. Although feeling that he didn’t have adequate training for the task, Bauer’s aim was to ‘instil a greater interest and love for the German language among the youth’ (Bauer 1850: vii).

In 1850 Bauer published the first edition of the Grundzüge der Neuhochdeutschen Grammatik ‘Foundations of the Grammar of modern high German, consisting of Wortbildung ‘etymology’ Wortbiegung ‘inflection’, and Satzlehre ‘syntax’. There was also Lautlehre ‘phonetics, the study of the sounds’ and Rechtschreibung ‘orthography.’

I now examine Bauer’s German grammar as a specifically linguistic achievement. There had been a debate in Germany about what kind of grammar was needed (Fuchshuber-Weiβ 2013: 80). This need had become more acute with the unification of Germany, the establishment of the German Empire, industrialisation and rising standards of education.
Bauer’s grammar was primarily pedagogical and resulted from his considerable experience of teaching grammar to German speakers. According to Vesper (1996: 76):

The grammar proceeds methodically in such a way that all age and achievement levels are addressed. Therefore it should not be worked through from left to right but from simple to more complicated matters, and the learning process has to be controlled by repetition, discussion and exercises.

The grammar combined both synchronic and diachronic elements and ‘the result of this synthesising is a mixed grammar’ (Fuchshuber-Weiβ 2013: 79). Bauer’s grammar is also descriptive although the examples are taken from literary works so it is actually a grammar of written German. Bauer also described the current state of comparative philology and the development of languages.

Bauer seems to have had an eclectic approach to linguistic theory. Although self-described as a layperson and an autodidact in linguistics, he enlisted support from various sources in the areas of dialects and language history, phonetics, word formation, orthography and syntax. Although the first edition of the Grammar (1850) was his own work, Bauer sought help with the second edition (Fuchshuber-Weiβ 2013: 12). Bauer received help from the linguist and Germanist Georg Karl Frommann (1814-1887), the editor of the journal *Die deutschen Mundarten* (The German dialects)\(^{24}\). Bauer (1859: VI) said that “the syntax is based on KF Becker’s.” Karl Ferdinand Becker (1775-1849) taught non-German speakers to speak German and was concerned to represent the logical relations of German in syntax. Becker divided syntactic relations into predicative, attributive and objective and this division is replicated in Bauer’s grammar. Becker’s

\(^{24}\) Frommann’s scholarly interests demonstrate the link between Bible translation and linguistics. He worked on a revision of Luther’s (1522) New Testament and also the Old Testament. He also worked on the (1869-78) version of the Bavarian Dictionary, originally authored by Germanist and linguist Johann Andreas Schmeller (1785-1852) (Streitberg 1936:149). It appeared in two parts in 1872 and 1877.
analysis of syntax was particularly influential for school grammars and was used for a hundred years after it was written (Koerner 1975: 739). Lexicology and morphology corresponds to the historical school of Jacob Grimm (Bauer 1859: VI). Etymology is presented according to the analysis of FLK Wiegand (1804-1878) (Vesper 1996: 76).

Bauer was clearly influenced by Raumer. For several years Bauer had worked as a volunteer at an educational institution for youth which had been established by Rudolf’s father Karl von Raumer in Nürnberg in 1823 (Roessler 2013: 21). He had read papers that later became Raumer’s *Collected Works* (Raumer 1863). Bauer appears to have seen the historical and phonetic schools of thought as in tension and was committed to the phonetic approach (Bauer 1869: 135). He regarded Raumer’s writing as *massgebend* ‘authoritative’ (Bauer 1872: VI). He had modified some of his views about the orthography question and adopted Raumer’s physiological approach to sounds (Vesper 1996:76). Bauer (1859: 134) cites the principle *Schriebe, wie du sprichst* as ‘the first and most important principle of the orthography which is to write as you speak’. Bauer (1859: 143) concludes, ‘Der lebendige Sprachengeist ist der Meister, dem sich alles beugen muß’ (‘The living language spirit is master to which all should bow’). The content of the Grammar was affected by contemporary religious and political trends but most of all from theological sources which were grounded in the Lutheran Reformation. For that reason a special version of Bauer’s grammar was prepared for Catholic schools in Austria. The two versions were almost the same in content according to Bauer (1872: IV), except that the exercises and examples in which those from Luther and other Protestant sources were replaced with those from Catholic sources. The first edition contained no confessional information on the front cover but the 1859 edition was titled *Ausgabe für protestantische Schulen* (a version for Protestant schools). Both versions were used in Bavaria.
Bauer later decided to provide an "etymology auxiliary book" for teachers. It was tailored to the grammar, containing explanatory notes to historical phonetics and word formation and an alphabetical word register, to elucidate the origin of each word. It appeared in 1859 as *Etymologie der Neuhochdeutschen Sprache* ‘Etymology of the New High German language’ and was well received (Fuchshuber-Weiβ 2013). Bauer’s introduction also contained a history of German literature and described the rise of High German as *die allgemeine deutsch Schriftsprache*, the ‘general German written language’ which had become established through the Reformation (ibid). Bauer also wrote a Latin grammar the *Elemente der lateinischen Grammatik* (Bauer 1865), (Benfey 1869: 647; Fuchshuber-Weiβ 2013: 118).

Bauer’s grammar was published for sixty two years. There were fifteen editions of the grammar published within Bauer’s lifetime and the grammar had run to twenty seven editions by 1912 (J. Strehlow 2011: 206). The 1850 grammar consisted of 121 pages but was expanded to over 160 pages in the 1859 edition and 208 pages by the 1872 edition in what became an increasingly sophisticated document through its many editions.

The publication of Bauer’s grammar had been timely. With German unification in 1871 and proposals for Spelling Reform, there was the impetus for innovation. There was a great upsurge of interest in the German language and a lack of textbooks for German language instruction. Bauer’s work was found to be in high demand for the school book market. In the territories of the German Confederation ‘a standardized language, normative usage, and generally accepted writing practices had gained increasing importance both for economic reasons and for publishing’ (Fuchshuber-Weiβ 2013: 133). The grammar was a *Wegbereiter* ‘forerunner’ (Jahnel 2013) to the well-known Duden, named after the philologist Konrad Duden (1829-1911). The etymology book appeared in
1893 in three editions under Duden’s name and the Grammar continued as volume 3 of the larger Duden, (Fuchshuber-Weiβ 2013: 16).

Recently there has been a favourable reassessment of Bauer’s work. Vesper (1996: 76) claims that ‘what made the grammar so successful is the fact that it tried to incorporate the results of the main trends of German grammatical research of that time’. Praising Bauer’s efforts, Fuchshuber-Weiβ (2013: 18) says that,

With the right sense of the times, the teacher Bauer had presented with expertise, skill and tremendous industry two major, highly successful standard works on German language teaching. They served long after his death as language guides and for speech cultivation in schools and in everyday life.

Bauer’s development of the Neuendettelsau curriculum is explored further in §4.1.2.

3 Philology and linguistics in the mid-nineteenth century

I will now explore and define the term ‘philology’ as a form of textual scholarship. The majority of linguists in the first half of the nineteenth century were classical philologists and regarded comparative philology as a recently-developed branch of classical philology. The term Sprachwissenschaft ‘linguistics’ was not often used of language research. Curtius (1848:5) and Raumer (1870:1) explain that the term Philologie had a doppelten Bedeutung, ‘double meaning’, being used in two different ways, referring more broadly to the study all aspects of a people and its culture or more narrowly to the study of language and literature. In his history Raumer took the word in its second sense as a

25 The term ‘Philology’ is currently used in different ways in different countries and traditions. In English-speaking countries, ‘philology’ came to mean ‘comparative and historical linguistics’ which was different to its use in Europe.

26 Raumer claimed that his real task was to write a history of research in the Germanic language and literature:
more narrowly language-focused discipline founded upon the study of language and the related fields of interpretation, translation and exegesis to provide a foundation for studying languages and literatures. Grammars and dictionaries were designed to help to interpret and understand the texts. Philology began as one of the Hilfswissenschaften ‘helping sciences’ or ‘preparatory sciences’ for theology and philosophy. During the nineteenth century philology became autonomous of other fields of study (Curtius 1848: 3). Franz Bopp envisaged the purpose of treating language ‘als Gegenstand und nicht als Mittel der Erkenntiniss’, that is, ‘an object and not as a means of knowledge’ (Bopp 1833: I xiii-xiv). The focus was on language itself rather than using language to understand other cultures. August Schleicher (1850) clearly distinguished philology as the study of written texts of an individual language and linguistics as the comparison of languages to discover the general properties of language. He claimed that unwritten languages are of the greatest interest to linguists:

Dem Linguisten dagegen kann die Sprache eines Volkes von dem höchsten Interesse sein, das von der Schreibekunst keine Ahnung hat, ihm ist die Litteratur nur rein willkommenes Mittel zu genauerer Erforschung der sprachlichen Verhältnisse. (Schleicher 1850: 2).

“For the linguist there is the greatest interest in languages without literature, for him the literature is a welcome means for a better study of linguistic relationships”

The foundation of general linguistics goes back to Herder, Friedrich Schlegel (1772-1829) and Wilhelm von Humboldt (1767-1835). Comparative philology emerged from philology with the discovery of the relatedness of Indo-European languages. Comparative philology became the dominant stream of language research (Robins 1990: 180), with an interest in structural comparison rather than the earlier interest in lexical comparison

Aber unsere eigentliche Aufgabe ist die Geschichte dessen, was die Deutschen für die Erforschung der germanischen Sprachen und Literaturen geleistet haben.

123
(Davies 1975: 623). Koerner (1983) claims that Indo-European comparative-historical linguistics was almost identical with linguistics *tout court* until the end of the First World War.

### 3.1 The impact of comparative philology

Nineteenth century philology diverged into a number of separate disciplines: Oriental studies, Germanic studies, comparative philology, dialectology and typology. Kneebone (2001) discusses the impact of comparative philology on the linguistic researchers at Lake Killalpaninna. A universal alphabet was devised by Richard Lepsius in the mid-nineteenth century for ‘practical’ and ‘scientific’ purposes (Moore 2018: 3). Lepsius was trained in the classical languages and gained extensive knowledge of languages of the Middle East and Africa. His study of Sanskrit enabled him to understand the different sounds which had been recorded by the Sanskrit phoneticians such as Panini. The ‘Standard Alphabet’ (Lepsius 1854: 1863) was also based on the information coming from missionaries.

By the last part of the nineteenth century natural sciences gained increasing prestige. As Robins (1990: 202) suggests, the Neogrammarians tried to found the discipline of linguistics on the ‘hard’ sciences such as physics and geology. The Neogrammarian programme started around 1876-8 with the publication of some significant papers (Robins 1990: 202). By the 1870s comparative philology was dominant in Germany. Phonetics was one of their central concerns, based upon the universality of natural laws. As a level of language which is open to rigorous, objective analysis (Koerner 1983: XXXII), phonetics became dominant as an experimental science conducted in the laboratory:

> The new discipline of phonetics recast linguistics as a natural science, distancing it from the humanistic pursuit of philology by refocusing attention on bodies and the sounds they produced instead of written texts.
Much of what had been gained by earlier linguists was lost by the Neogrammarians through their insistence upon ‘meticulous attention to detail’ (Robins 1990: 204). Data gathering was conducted in the Metropole rather than in the field as ‘the concern with physicality at the phonetics laboratory signalled a sharp turn away from missionary attention to language as an expression of culture and psychology’ (Pugach 2012: 138). In the early part of the twentieth century, data was collected in language laboratories that had been established in Hamburg and Berlin. While he was at Erlangen from 1875-77, ‘Meinhof worked briefly but intensely with philologist Rudolf von Raumer (Pugach 2012: 72).’ Raumer was ‘particularly concerned with standard orthography, phonetic change and language change, all of which were later critical to Meinhof’ (ibid).

Opposition emerged to the dominant orthodox linguistics of the Neogrammarians as critics objected to the narrowing of the field by the Neogrammarians and the move from a humanities-based discipline to one founded upon Positivism. There emerged at the Jahrhundertwende fin de siècle a ‘new consciousness about the character of language and thus, also about linguistics’ (Arens 1955: 354). The critics were primarily from classical philology, dialectology and the Humboldtian school although Arens (1955: 353) describes them as ‘linguists, philologists, psychologist and philosophers’. They were a diverse group but Arens (1955: 354) says that Finck’s sentence, “Science begins firstly with the conceptual processing of intuitive knowledge” was what they meant though in different ways. Some critics such as Georg Curtius (1820-1885) remained classical philologists and continued to study and publish on the ancient languages in journals dedicated to classical philology. Curtius’s comparative grammar of Greek and Latin (Curtius 1875) was recommended by Friedrich Bauer in the introduction to his own Latin grammar (Bauer 1865: V). Some of those who were the most critical of comparative philology were those who studied living dialects (Robins 1990:206) because they found
that there were individual and highly variable factors in dialects that went against the
regularity of the sound laws.

3.2 General Linguistics
As I explain in Moore (forthcoming), key language ideologies emerged from the German
philosophy of language tradition. The study of language was seen as central to
understanding. The conception of a parallel development between thought and speech
was first suggested by Herder and later carried forward by Humboldt (Robins 1990: 194).
Language difference was a key language ideology which descends from the German
language philosophy tradition but can be traced back earlier to the sixteenth century
Humanists. For example, sixteenth century scholars knew that Hebrew was very different
from the familiar European languages through their attempts to translate and interpret the
Hebrew text of the Old Testament. It was the actual encounter with a large range of
languages and attempts to translate them in the late eighteenth and nineteenth centuries
which led to the development of linguistics. The emphasis was upon the diversity of
languages, on particularism, rather than upon universal categories of grammar which was
characteristic of the late eighteenth century (Graffi 2001: 5).

3.2.1 Max Müller
Max Müller (1823-1900) typifies the philologist or general linguist of the nineteenth
century as his main interest was in language, literature and textual scholarship. Müller
was a popularizer of linguistics. He gave two courses of lectures in England in 1861-64
during which he ‘made the results of Comparative Philology known to Englishmen’
(Sandys 1915: 406). Müller’s Lectures on the Science of Language was widely available
and read and cited by missionaries who were working in Central Australia, for example
writes of Müller that he was ‘at the centre of a philologically-focused network of overseas
correspondents, and whose work provides a kind of anti-positivist counterpoint to the
dominant social evolutionism.’

Müller was a student of Franz Bopp in Berlin where he learned to read Sanskrit. He was
influenced by the German philosophy of language with its emphasis on the close
relationship between thought and language. For Müller, language learning was the *sine
qua non* of real anthropological work (Crick 1976:16). Müller was appointed to the chair
of Comparative Philology at Oxford. Despite this title, he is more representative of
general linguists, retaining broad interests throughout his long tenure at Oxford
University in the second half of the nineteenth century.

Müller edited texts along with dictionaries and grammars which were used to interpret
texts. Those reading the Sanskrit grammarians and texts relied upon Müller’s translation
of their works, for example, a collection of texts from the *Hitopadesia* with Devanagari
script and interlinear text (Müller 1864). He eventually edited the fifty volumes of the
*Sacred Books of the East* which was published by Oxford University Press between 1879
and 1910.

### 3.2.2 Humboldtian linguistics

In the latter part of the nineteenth there was a paradigm shift in linguistics away from
text-based philology. However, within Germany and the USA, general linguistics
remained strong. From the middle of the nineteenth century a typological tradition grew
up influenced by Humboldt, which contrasted strongly with the historical focus and
increasingly positivist comparative philology of the Neogrammarians (Koerner 1977).
Humboldt was a contributor to general linguistics, in contrast to specialized empirical
research (Forster 2011: 112). This tradition continued through Germany in the nineteenth
and twentieth centuries. Typical of the school was extensive fieldwork and the collection
of language data from many “exotic” languages. Although there was a general lack of interest by mainstream linguists of the last quarter of the nineteenth century in Humboldt’s work (Koerner 1971: 791), some Humboldtians retained academic positions in Germany. The tradition became influential in the United States through the German Franz Boas and the key language ideologies of the tradition were adopted by American anthropology and linguistics. Boas was influenced by Heymann Steinthal (1823-1899), duplicating the structure of Steinthal’s (1867) language description (Bunzl 1996: 69). Boas was ‘extending Steinthal’s principles of text criticism of non-Indo-European literary materials to Native American Texts’ (Bunzl 1996: 68). But unlike the written languages of Europe, texts had to be created for Native American languages as part of his anthropological project.

3.2.3 F.N. Finck
Franz Nikolaus Finck (1867-1910) is typical of this tradition, as one of the most ‘outstanding representatives of General Linguistics in Germany’ (Arens 1955: 354). Finck saw language as an ‘expression of worldview’ (Arens 1955: 356). He engaged in linguistic fieldwork on Gaelic of the Aran Islands. From 1907 he was in charge of the department of Oceanic languages in the Oriental Seminar (department) at Berlin. He taught John Peabody Harrington (1884-1961) who documented many endangered languages of the USA. Finck corresponded with Moritz von Leonhardi and Carl Strehlow about Aranda grammar.

4 Missions
German missions were started from the Pietist and Awakening movements. The Old Lutheran movement was started by Johann Gottfried Scheibel (1773-1845) who opposed
the Prussian church union (Rössler 2013: 19). Many Lutherans left Silesia to pursue religious freedom and formed the Australian Lutheran churches.

4.1 Missionary training institutes

How were missionaries trained in the language disciplines? In Veit’s (1991: 121) view ‘it boils down to the questions of how the future missionaries were prepared for their anthropological and ethnological work’ and then how they carried their training into the field’. The missionary institutions varied greatly in the degree to which they trained their students in language study. The learning of languages featured in the education of the mission institute founders. However, this was not always the case. Errington (2008: 94) identifies factors such as Faith, status and nationality which are useful categories for considering such differences between missionaries’ approaches to language and their success or otherwise in linguistic fieldwork. For example Edwards (2007) says that the Moravian tradition of encouraging ‘the use of vernacular languages was not fully realised in Australia because of the fragility of the Aboriginal situation in the colonial period and the problems arising from the multiplicity of dialects.’ The followers of the mission founders, Theodor Harms at Hermannsburg and Friedrich Bauer (1812-1874) at Neuendettelsau retained these policies which were passed on to their students of the 1870s and 1880s, including those who became the Hermannsburg and Neuendettelsau missionaries of Central Australia.

4.1.1 Hermannsburg

The Hermannsburg Mission Institute was established in 1849 by Louis (Ludwig) Harms (1808-1865) (Reller and Harms 2008: 75). He studied at Göttingen in 1827 (Reller and Harms 2008: 28) where he learned Italian, Spanish, Sanskrit, Modern Greek, Syriac and Chaldean. (Syrisch und Chaldaisch). Harms tutored in Latin and Greek when he was a private tutor in 1835, tutoring in Greek, Latin and French translation (Reller and Harms
When Louis died in 1865 he was succeeded by his brother Theodor (1819-1885). The Harms brothers, the founders of the Hermannsburg mission society in Germany preferred missionary candidates with agricultural and trade training to those trained in universities (Tampke 2006: 59). Kempe was aware of this deficiency, commenting that,

But where the language has to be extracted, each word to be determined and and, not only that, but where the language has first to be organised, it would have been expedient to place missionaries here who would have mastered completely Greek, Hebrew and Latin.’ (Kempe 1888: 15-16 cited in Veit 2004: 146).

The missionaries hope to find collaborators who were interested in researching Australian Aboriginal languages as Kempe indicated, ‘these pages are submitted in the hope that they will be interesting to the philologist as exhibiting the particular structure of the language (1891: 1).’ For him, ‘there still remain mysterious phrases’ and unresolved questions. There were numerous grammatical questions which ‘would require a philologist to classify or properly arrange, and any hints in this direction would be thankfully received by the writer’ (Kempe 1891: 25). Kneebone (2005: 361), writing about the Hermannsburg missionaries at Lake Killalpaninna concludes that:

In general, however, the Lutheran Missionaries to the Dieri 1866-85 did not produce or publish philological work for the benefit of science, and were rarely cited as informants for scientific investigations. …. it appears that philological and ethnographic questions were simply not their priority.

Kempe corresponded with Ferdinand Mueller, the Government botanist of Victoria, and collected specimens of the plants of Central Australia (Latz 2015: 31). But the Hermannsburg missionaries do not appear to have collaborated with linguists and ethnologists or with those in Germany who were interested in obtaining data from the field.
4.1.2 Neuendettelsau

Johann Konrad Wilhelm Löhe (1808-1872) studied at the University of Erlangen from 1826 and graduated in 1830. He attended the lectures of Schleiermacher (See §1.3.1) during a year’s study in Berlin in 1828 and valued Schleiermacher’s clarity and perspicuity in preaching (Liebenberg 2011: 17). Löhe founded the Neuendettelsau Mission Institute after moving to the village of Neuendettelsau in Franconia in 1837. In 1849, Friedrich Bauer was employed full-time on behalf of the Gesellschaft für innere Mission im Sinne der lutherischen Kirche, [Society for the Inner Mission of the Lutheran Church] and given the direction of the Neuendettelsau mission preparation institution. (Koller 1924: 8). I have already discussed Bauer’s Grammatik and I will now discuss the specifically educational contribution that Friedrich Bauer made to the Neuendettelsau Mission Institute. John Strehlow (2011: 206) credits Bauer with devising the curriculum of the Neuendettelsau mission institute. His training at the gymnasium and universities led him to teach on a humanist basis. The timetable for Neuendettelsau missionary candidates included Hebrew, Latin, Greek and English including Schriftauslegung ‘interpretation’ or ‘exegesis’ (See Appendix 1). Also included was Rhetorik, reflecting the importance of the spoken word. Bauer taught Satzlehre ‘syntax’ and Wortbildung ‘word formation’ through his German Grammatik from at least 1856. The work of theoreticians such as Grimm, Raumer, bilingual lexicographers, translators and exegetes were mediated to his students at the mission training institute. The Neuendettelsau involvement in Australia began when the Immanuel Synod leaders engaged with Bauer and read his letter of 11 December 1873, ‘to furnish clergy for their rapidly expanding congregations’. They also required a missionary for the Bethesda Mission (J. Strehlow 2011: 212).

Bauer transferred humanist philology to his successors, the Deinzer brothers, who continued to build upon the foundation which Bauer had laid and followed his rigorous
example. Johannes Deinzer (1842-1897) studied at the University of Erlangen where he ‘came under the influence of von Hofmann, Thomasius, von Raumer and Naegelsbach’ (J Strehlow 2011: 214). He took up a post as teacher at Neuendettelsau in 1864. Deinzer was principal of Neuendettelsau Seminary from 1874 to 1897 (J Strehlow 2011: 213) when he taught the Neuendettelsau candidates including many of those who went to Australia: Carl Strehlow, JG Reuther, Friedrich Leidig, JP Loehe, Wilhelm Poland, Adolf Ortenburger and Johannes Flierl I.

Carl Strehlow attended the mission institute in 1888 (Kenny 2009: 93). His initial training was with Carl Seidel at his home village of Fredersdorf in Prussia. J Strehlow (2011: 214) credits Seidel with providing Carl Strehlow’s early linguistic formation.

The Neuendettelsau Stundenplan (timetable) for the Winter Semester 1888-89

(See Appendix 1 for the English translation)
5 Conclusion

Linguistics emerged from classical and oriental philology of the early nineteenth century. The Lutheran reformers absorbed and used sixteenth century Humanist philology in their quest to translate the Bible and Catechism. It was through the emergence of Germanic philology and the interest shown in it, that philology eventually became focused upon living languages and was extended from the ancient languages to Germanic languages, to unwritten languages of Africa, the Americas and Australia. Much of the linguistic research was done by missionaries. The Neuendettelsau missionaries applied humanist philology to the languages of Australia and it is clear that they went further than their Hermannsburg predecessors. The founders of the Neuendettelsau seminary and its curriculum were thoroughly grounded in humanism and the nineteenth century revival of Confessional Lutheranism which harked back to the strong connection between theology and philology. The mission teachers were able to harness the techniques of philology just as their sixteenth-century predecessors had done. Friedrich Bauer used humanist philology as a means of training missionaries. Clearly their priority was to translate the Bible and Confessions into Aboriginal languages and to preach and teach Lutheran Christian doctrines and they were well equipped for the task. After 1900 the Neuendettelsau missionaries became increasingly interested in improving their translation through ‘a better knowledge of Dieri cultural practice’ (Kneebone 2005: 364). It was the arrival of the Neuendettelsau missionaries at Lake Killalpaninna which changed the focus to one on linguistic and ethnographic research. Their concern to understand languages led to their further engagement in the description and explanation of them. At Hermannsburg in the Northern Territory Carl Strehlow compiled Die Aranda and also translated the New Testament.
As they had done in the first half of the nineteenth century, missionaries collaborated with general linguists and ethnologists who were interested in language diversity, language philosophy and fieldwork. General linguistics as text-based philology was more influential for the Australian missionary linguists than the comparative linguistics of the neogrammarians. The missionaries shared much with linguists of the first half of the nineteenth century before linguistics became formalized as an autonomous discipline with affiliation to the natural sciences.
### Stundenplan für das Wintersemester 1888-89

<table>
<thead>
<tr>
<th>Montag</th>
<th>Dienstag</th>
<th>Mittwoch</th>
<th>Donnerstag</th>
<th>Freitag</th>
<th>Samstag</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9</td>
<td>Ethik</td>
<td>Dogmen</td>
<td>Ethik</td>
<td>Vortrag. od.</td>
<td>Kirchen-</td>
</tr>
<tr>
<td></td>
<td>Altest.</td>
<td>Geschichte</td>
<td>Symbolik</td>
<td>English</td>
<td>geschichte</td>
</tr>
<tr>
<td></td>
<td>Einleitung</td>
<td>Hunnius</td>
<td></td>
<td>Altest.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Einleitung</td>
<td></td>
</tr>
<tr>
<td>9-10</td>
<td>Ethik</td>
<td>Rhetorik</td>
<td>Deutsch</td>
<td>Ethik</td>
<td>Schrift-</td>
</tr>
<tr>
<td></td>
<td>Symbolik</td>
<td>Bibl.</td>
<td>Geschichte</td>
<td>Altest.</td>
<td>auslegung</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Geschichte</td>
<td>Einleitung</td>
<td></td>
<td>Od.</td>
</tr>
<tr>
<td>10-11</td>
<td>Kirchen-</td>
<td>Kirchen-</td>
<td>Dogmen</td>
<td>Rhetorik</td>
<td>Hebraisch</td>
</tr>
<tr>
<td></td>
<td>Geschichte</td>
<td>Geschichte</td>
<td>Geschichte</td>
<td>Bibl.</td>
<td></td>
</tr>
<tr>
<td>11-12</td>
<td>Griechisch</td>
<td>Englisch</td>
<td>Griechisch</td>
<td>Griechisch I</td>
<td>Griechisch</td>
</tr>
<tr>
<td></td>
<td>Latin</td>
<td></td>
<td>III</td>
<td>Latein II</td>
<td>I</td>
</tr>
<tr>
<td>2-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-5</td>
<td>Latein III</td>
<td>Griechisch IV</td>
<td>Latein III</td>
<td>Griechisch IV</td>
<td>Hebraisch</td>
</tr>
<tr>
<td></td>
<td>Latein I</td>
<td>III</td>
<td>Latein I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6</td>
<td>Weltgeschichte</td>
<td>Apocalypse</td>
<td>Gesang</td>
<td>Weltgeschichte</td>
<td>Apocalypse</td>
</tr>
</tbody>
</table>

### Timetable for the Winter Semester 1888-89

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9</td>
<td>Ethics</td>
<td>History of</td>
<td>Lecture or</td>
<td>Church</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Old Test.</td>
<td>Dogmatics</td>
<td>English</td>
<td>history</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>Hunnius</td>
<td>Old Test.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ethics</td>
<td>Symbolics</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>9-10</td>
<td>Ethics</td>
<td>Rhetoric</td>
<td>Essay</td>
<td>Ethics</td>
<td>Interpretation</td>
</tr>
<tr>
<td></td>
<td>Symbolics</td>
<td>Bibl.</td>
<td>or English</td>
<td>Old Testament</td>
<td>or English</td>
</tr>
<tr>
<td></td>
<td></td>
<td>History</td>
<td>Essay</td>
<td></td>
<td>Introduction</td>
</tr>
<tr>
<td>10-11</td>
<td>Church</td>
<td>Church</td>
<td>History of</td>
<td>Rhetoric</td>
<td>Hebrew</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>history</td>
<td>Dogmatics</td>
<td>Bibl.</td>
<td></td>
</tr>
<tr>
<td>11-12</td>
<td>Greek</td>
<td>English</td>
<td>Greek III</td>
<td>Greek</td>
<td>Greek I</td>
</tr>
<tr>
<td></td>
<td>Latin</td>
<td></td>
<td>Latin</td>
<td>I</td>
<td>Latin II</td>
</tr>
<tr>
<td>2-3</td>
<td></td>
<td></td>
<td>Greek</td>
<td></td>
<td>Greek I</td>
</tr>
<tr>
<td>3-4</td>
<td></td>
<td></td>
<td>I</td>
<td>Hebrew</td>
<td></td>
</tr>
<tr>
<td>4-5</td>
<td>Latin III</td>
<td>Greek IV</td>
<td>Latin III</td>
<td>Greek IV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Latin I</td>
<td>I</td>
<td>Latin I</td>
<td></td>
<td>Greek 1</td>
</tr>
<tr>
<td>5-6</td>
<td>World</td>
<td>Revelation</td>
<td>Singing</td>
<td>World</td>
<td>Revelation</td>
</tr>
<tr>
<td></td>
<td>history</td>
<td></td>
<td></td>
<td>history</td>
<td></td>
</tr>
</tbody>
</table>
References


Kittelson, James M. 1985. Luther the educational reformer. Luther and Learning, 87-102.


Müller, Friedrich M. 1866. Lectures on the science of language: Delivered at the Royal Institution of Great Britain in April, May, & June 1861, Longmans: Green and Co.


Passow, Franz. 1812. Über zweck, anlage und ergänzung griechischer wörterbücher... F. Maurer.


Verhandlungen der zur Herstellung größerer Einigung in der deutschen Rechtschreibung berufenen Konferenz 1876.


Crosscurrents in linguistic research: Humanism and Positivism in Central Australia 1890-1910

Abstract
Trained in nineteenth century humanist traditions of philology, German Lutheran missionaries conducted linguistic fieldwork in the Dieri, (Diyari) language near Lake Eyre in South Australia and in the Aranda (Arrarnta, Arrernte) and Luritja languages at Hermannsburg in the Northern Territory. As the discipline became increasingly positivist in the late nineteenth century, anthropologists and linguists with this very different orientation also took an interest in the languages of Central Australia. In this paper I contrast the training and education, nationality and research methodologies of humanist and positivist researchers of Central Australian languages arguing that common metascientific orientations are more significant than nationality for understanding their research.

1 Introduction
The period 1890-1910 saw the first comprehensive grammars and dictionaries of Central Australian Aboriginal languages. Lutheran missionaries from the Hermannsburg Missionary Institute in Lower Saxony in Germany conducted linguistic fieldwork in the Dieri (Diyari) language near Lake Eyre in South Australia from 1866. After the Hermannsburg Mission in the Northern Territory was established in 1877 Hermann Kempe (1844-1928) researched the Aranda (Arrarnta, Arrernte) language. The Hermannsburg missionaries left Central Australia in 1891. Carl Strehlow (1871-1922) arrived in 1894 after training at the Neuendettelsau mission institute in Franconia, Germany in which humanist philology played a greater role than it had at Hermannsburg.

The missionaries were not alone. During 1907 and 1908 five descriptions of Central Australian languages were published. In tracing the history of German anthropology Kenny (2013: 51) claims that ‘Strehlow had little contact with his British-Australian contemporaries’ (Kenny 2013: 51). Discussing the antagonism between the English biologist and anthropologist W.B. Spencer and Strehlow, Kenny does not discuss like-
minded English-speaking researchers such as R.H. Mathews (Mathews 1907; Thomas 2007) and N.W. Thomas who collaborated with Strehlow. The ‘German fin de siecle anthropological tradition that was language based’ (Kenny 2013:99) was not monolithic and there is a need to take account of the discontinuities in German Ethnology which are so evident on reading the German sources. Citing Monteath (2013) and acknowledging that Antihumanists were also ‘well represented among the Germans’, Kenny (2013:228) also fails to analyse the antagonism towards Strehlow by German Antihumanists.

I characterise two contrasting kinds of research as ‘humanist’ and ‘positivist’ according to the influences of nationality, education and training (Errington 2008:94), arguing that metascientific orientations and language ideologies (Moore forthcoming) more than nationality determined their approaches to linguistic research. An understanding of these factors is necessary for interpreting their linguistic descriptions and also for understanding the collaborations between some researchers in the field and the antagonisms between others.

1.1 Humanist and Positivist Paradigms in the early twentieth century

The labels ‘humanism’ and ‘positivism’ refer to philosophies or epistemologies or means to finding ‘a method by which humans could be classified and known’ (Zimmerman 2001: 186), reflecting a division that existed in Germany since the Aufklärung (Enlightenment), into Naturwissenschaften (natural sciences) and Geisteswissenschaften (human sciences). Humanism arose in the Renaissance as the study of the classical world (Giustiniani 1985: 172) although this term refers to diverse branches of scholarship (Adams 1998: 258). Humanists scholars privileged the study of language for understanding other societies (Zimmerman 2001:53), developing the methods of textual criticism, hermeneutics and translation to understand texts.

Early anthropologists such as James George Frazer (1854-1941) were trained in Classics as the study of the ancient civilizations of Greece and Rome. A division of labour

---

27 The Geisteswissenschaften included both the humanities and social sciences, for which there was no clear division in the nineteenth century (Adams 1998: 282).

28 Another term which contrasts with ‘Positivist’ is ‘Idealist’ (Vossler 1904) which applies to developments in German philosophy later than the Humanist origins in the sixteenth century.
developed as the two disciplines diverged (Marett 1908; Kluckhohn 1961). The subject material of Classical Studies was ‘civilized peoples’, that is, those with a written literature while the subject material of anthropology was the ‘natural peoples’, those without written literatures. Within Germany the move from the humanist philological sciences to positivist sciences was underway about 1850 (Smith 1991:26), reflecting wider changes in society in the “age of positivism” (Massin 1996:120).

2 Central Australian missionary linguistics as Humanist research

Initially, missionaries sought words in Indigenous languages as translations of key theological terms in order to translate the Catechism and later, the Bible into Aboriginal languages. Kempe published a grammar and wordlist of ‘the language of the Macdonnell Ranges’ (Kempe 1891). His treatment of the language was tentative: ‘the following pages, therefore, do not profess to contain a complete vocabulary, nor one which would satisfy the learned philologist’ (Kempe 1891:1). The Neuendettelsau curriculum was based upon philology and Lutheran theology with the purpose of enabling the mission candidates to translate and interpret biblical texts. Strehlow’s training replicated the ‘classical orientation’ (Kenny 2013:83) in which proficiency in reading ancient languages enabled scholars to understand the biblical and classical Greek and Roman worlds. Language training included instruction in Latin, Greek, Hebrew, English and German syntax and word-formation, and prepared missionaries for translating languages (Völker 1999:8; Nobbs 2005:26). Strehlow revised Kempe’s earlier grammar, dictionary and hymnbook. Aranda became a language of interest to European scholarship and the need to obtain reliable data from the field prompted Freiherr Moritz von Leonhardi (1856-1910) to request information from Strehlow who extended his research to the collection of texts and translations of Die Aranda-und Loritja-Stämme in Zentral-Australien (Strehlow 1907-1920).

For German Lutheran missionaries the first step in understanding was to acquire Aboriginal languages. They learned the languages rapidly through social interaction. The

29 Anthropology is the only discipline which is allied to the humanities, social sciences and natural sciences.
Neuendettelsau-trained Lutheran missionary in North Queensland Wilhelm Poland said that ‘There was in fact only one way of learning the language, and that was to mix with the older generation in their camps’ (Poland 1988: 103). The Aranda elder and Evangelist Moses Tjalkabota was ‘surprised at the rapid rate of progress which Carl Strehlow made with the language’ through reading Kempe’s grammar and hymnbook. (Latz 2015:65-66). The Aboriginal elders Loatjira, Pmala, Tjalkabota and Talku worked with Carl Strehlow on the compilation of Die Aranda (Kenny 2013: 29). Talku (c.1867–1941) told him the Loritja myths for the 1908 and 1911 volumes of Die Aranda. Strehlow’s collections of Loritja texts, grammars and dictionary were the first comprehensive record of a Western Desert language.

Monolingual speakers of Aboriginal languages were often not able to understand the researcher’s questions. In the preface to his grammar, Kempe (1891:1) describes the problem for linguistic research,

the result of an attempt to analyse a language of which the people speaking it have only a colloquial knowledge, and who are consequently incapable of answering or even understanding grammatical questions, must be in many respects imperfect. The difficulty is increased by the wandering habits of the people.

Kempe was aware that Europeans would be told what they wanted to hear because of the gratuitous concurrence which occurs when an informant agrees with the researcher from a desire to please the questioner (Liberman 1985:198). Kempe (1891:1) emphasised the need to check language statements thoroughly: ‘Concerning the vocabulary, it may be mentioned that it has been carefully compiled and revised several times with different natives, so that the words may be relied upon as correct.’

Leonhardi discussed the difficulty of eliciting information:

One should never develop his own view and then put the question, “Is this how it goes?” The question must be rather expressed, “What have your elders taught about the matter?” Then some blacks are smart enough, to find the answer. In this way one can go back and check, whether it is correct. (Leonhardi 1907:286)

In his time at Bethesda from 1892 to 1894, Carl Strehlow and J.G. Reuther evaluated Dieri (Diyari) terms which would be useful for the Dieri New Testament translation and gained experience in translation, building on the earlier work of missionary Johann Flierl (Kneebone 2001). He became aware that Aboriginal languages are very different from
European languages. For example *neji* in Diyari can’t be directly translated as ‘brother’ (J Strehlow 2004: 83), as Aboriginal languages have separate words for ‘younger brother’ and ‘older brother’. Strehlow researched kinship with the ethnographic researcher Francis Gillen (Mulvaney et al. 1997). Leonhardi’s questions reflected such contemporary interests of European scholars as totemism, initiation rites and kinship, views of conception and ceremonial objects or *Tjurunga* (Schmidt 1908).

It was the systematising and generalising by Spencer and Gillen that led Strehlow to record the particular and local to find out what Aranda and Loritja said *in their own words*. Strehlow recorded texts in order to understand Aboriginal culture. In criticising Spencer and Gillen, Leonhardi wrote to Strehlow:

The big mistake of the books by these two researchers, it seems to me, is the fact that they systematise too much, that they try too hard to show universal views in a large area, while there should be no more than individual legends, local views and customs etc. and not a closed well-ordered system of custom. Only by providing individual stories and customs is it possible to bring out, through comparison, general aspects. (VL 1904-1-2, 28/8/04)

This ‘emic’ approach was later identified by Kenneth Lee Pike as ‘studying behaviour from inside the system’ (Pike 1967:37; Bolinger and Sears 1975:524), rather than taking an external perspective. Leonhardi’s *Linguistische Feststellungen*, ‘linguistic findings’ are the interlinear texts and the free translations, the myths and the songs of *Die Aranda*. Copious footnotes included translations and explanations of words which appear in the texts. The texts which were recorded only in German translation were apparently regarded as of less evidentiary value. Strehlow was also working on a grammar and comparative Aranda-German-Luritja dictionary which would help the reader to understand the *Urtext*. The importance of the *Urtext* can be understood from the comment of Leonhardi’s editorial successor Hagen (1911:285), ‘It is of some importance to know that the most important matter, the focal point so to speak, viz. the intellectual culture of the Aranda and Loritja, are in the main secured’. The uncompleted sections of *Die Aranda* deal mainly with material culture. Most critical for humanist research was to record what ‘the Other’ said *in their own words*. 

151
2.1 Collaboration with philologists in linguistic research

It was a challenge to find collaborators in Europe and to involve them in the work of language analysis and documentation sought by Kempe (1891: 1). Some German scholars were interested in language classification and typology particularly the ‘general linguists’ of the Humboldtian school. However, contemporary comparative philology in Germany was narrowly focused upon the Indo-European languages:

von der aufblühende historische-vergleichenden Sprachforschung wurde die typologische Sprachwissenschaft im Sinne Humboldts ziemlich in der Hintergrund gedrängt.

the flourishing historical-comparative language research pushed typological linguistics of the Humboldtian school somewhat into the background’ (Deeters 1937:216)\textsuperscript{30}.

Contact between Strehlow and a general linguist was facilitated by Leonhardi who could see the benefit of making Strehlow’s research available to European scholars. Franz Nikolaus Finck, a Professor of linguistics at the University of Berlin, provided comments on Carl Strehlow’s texts which Leonhardi sent him. In a letter to Strehlow Leonhardi says:

I would like you to know that Prof. Finck in Berlin, to whom I had sent the ‘Aranda Legends’ has in the last few days expressed high praise for the Aranda texts in a letter to me. Since Prof. Finck is a first-rate authority on Austr. Oceanic languages and I had sent him your essay as well, as you know, I am very pleased about this recognition.

(VS 1908-1-1)

3 Positivism

Positivists based their research on the natural sciences. Their valuation of the natural sciences grew up in the nineteenth century and led to a ‘sense that scientific discourse was more correct than others’ (Crick 1976: 154). For some positivists language was typically one category of human behaviour among many behaviours that could be described. The view that visual observation was the only reliable evidence about the ‘Other’ meant that ‘fieldwork’ became an essential practice within anthropology and began to replace ‘armchair’ scholarship at the turn of the century. Prominent in the development of fieldwork was Adolf Bastian (1826-1905), co-founder the Gesellschaft

\textsuperscript{30} The synchronic linguistics of Ferdinand de Saussure (1857-1916) made an appearance only after the publication of his Cours in 1916.
Für Anthropologie, Ethnologie und Urgeschichte ‘The German Society for Anthropology, Ethnology and Prehistory’ with Rudolf Virchow (1821-1902) and the first director of the Royal Museum für Völkerkunde in Berlin in 1873 (Köepping 1983). Völkerkunde 31 ‘classified and generalized the results of a strictly descriptive ethnography’ (Buchheit and Köepping, cited in Gingrich 2005:87). Bastian typified the positivist view, attacking interpretation, history and literature as unreliable ways of understanding the ‘Other’ (Zimmerman 2001: 61). However, he retained a respect for the philological tradition (Gingrich 2005:89). After his death in 1905, he was succeeded by his younger associates whom Gingrich (2005:91) characterises as ‘moderate positivists’. Positivists were not necessarily evolutionists and Bastian and others were opposed to evolutionism. In the following sections, the ‘moderate positivists’ (Gingrich 2005:99) are contrasted with ‘radical positivists’ or ‘Antihumanists’ (Zimmermann 2001; Monteath 2013).

3.1 Moderate positivists

The moderate positivists were overshadowed by the diffusionists in the first decade of the twentieth century in Germany but ‘remained as systematic fieldworkers and museum documentarists’ (Gingrich 2005:92), closer to the international mainstream of anthropology and particularly close to the German-influenced linguistic anthropology that was emerging in the USA. Among the moderate positivists were Konrad Theodor Preuss (1869-1938) and Karl von den Steinen (1855-1929). Preuss (1908; 1909) reviewed Carl Strehlow’s Die Aranda positively.

3.2 Antihumanists

Antihumanists followed social evolutionary anthropology which was the dominant paradigm in British anthropology by the turn of the twentieth century. Walter Baldwin Spencer (1860–1929) and Francis J. Gillen (1855–1912) may be characterised as Antihumanist. As Spencer admitted, ‘my anthropological reading was practically confined to Sir Edward Tylor’s “Primitive Culture” and Sir James Frazer’s “Totemism”’ (Spencer 1928:184). Spencer and Gillen followed Frazer’s lead and their monographs clearly show the influence of Frazer’s Golden Bough and the list of priorities for the

31 Völkerkunde can be translated as ‘cultural anthropology’. Anthropologie is translated as ‘physical anthropology’ (Massin 1996:82) and is therefore a false friend with current English ‘Anthropology’.
collection of significant ethnographic ‘facts’ outlined in his short questionnaire (Urry 1993:45). Frazer separated particular facts from their cultural contexts and arranged them within a continuous discourse of evolutionary development. When Virchow’s ‘inductive positivism’ (Massin 1996:138) was rejected, social evolutionism became more influential in Germany. I examine German Antihumanist researchers in the following sections.

3.2.1 Basedow

Herbert Basedow (1881-1933) was a medical practitioner whose family had migrated from Berlin to South Australia in the 1850s. He trained in Breslau under Hermann Klaatsch (1863-1916), an anatomist and physical anthropologist who founded an institute of physical anthropology in Breslau in 1907 (Massin 1996:84) and invited Basedow to study there in the same year (Basedow 1925:ix). Klaatsch was one of the first German physical anthropologists to adopt social evolutionary theory. In 1904 he travelled to Australia, visiting Melville Island, Tasmania and northwestern Australia (Oetteking 1916:423). He claimed that the Aborigines were ‘a relic of the oldest types of mankind’ (McGregor 1997:42), based upon the anatomical comparison of Aboriginal people with the Neanderthals and other earlier humans. Australian languages were also primitive: ‘The Australian dialects seem in many respects to be fragments of the primitive speech of man.’ (Klaatsch 1923:38). Adopting the evolutionary view of his mentor, Basedow (1908:208) compared sounds made by speakers of Aboriginal languages with those made by apes:

Es ist von Interesse, dass Garner in seinem bekannten Werk über die Affensprache gefunden zu haben angibt, dass die von im beobachteten Affen denselben Laut „ng“ besitzen und zwar im Zusammenhang mit dem Ausdruck der Zufriedenheit „ngkw-a“.

it is of interest that Garner in his well known work on ape language, found that the apes observed by him use the same sound ‘ng’ in the context of an expression of satisfaction ‘ngk-wa’.” (Basedow 1908:208).

Basedow was a member of the South Australian Government North-West Prospecting Expedition, led by L.A. Wells. He expected his officers to learn Aboriginal languages and to ‘to treat the natives in a friendly and considerate, yet firm and masterly way’ (Zogbaum 2010: 49). Basedow collected ‘a vocabulary of about 1500 words of the Aluridja (Western Desert) and Aranda languages’ (Harmstorf 2004:v). He admitted that he did not consult other sources and that ‘the article on language is not intended to be at all comprehensive’ (Basedow 1925:xii). The short term nature of Basedow’s trips were useful
for compiling wordlists but not for learning to speak languages fluently. His wordlist (Basedow 1908) is rich in names for physical objects but not mental and aspects of culture.

Although his evolutionary views are in strong contrast with Strehlow’s, Basedow appears to have been sympathetic to the Lutheran missionaries and appreciative of their linguistic research (Harmstorf 2004:vi). He was a Lutheran and had strong connections to the Barossa Valley and Adelaide Lutherans who supported the Hermannsburg Mission. He visited Hermannsburg Mission in 1919 and wrote, that, with Strehlow’s death ‘Science has lost and indefatigable and conscientious worker (Basedow 1925:ix).

3.2.2 Eylmann

Erhard Eylmann (1860-1926) included two chapters about language in his study of Aboriginal people in Australia (Eylmann 1908). Monteath (2013:34) characterises him as an ‘Antihumanist’ as he focused upon material culture rather than a humanist interest in language. Eylmann admitted the limitations of his understanding of the language:


Concerning the structure of the language, I cannot provide any great amount of information. I have not stayed in South Australia for enough time to do the necessary work to pursue language studies.

Eylmann became tired in a ‘surprisingly short time’. An example of how difficult it was to elicit terms through the English language is seen in Eylmann (1908:81) when he tried to elicit a word in the Awarai language equivalent to English ‘and’.

3.3 Positivism in linguistic research

August Schleicher (1850) first suggested that linguistics was a natural science, casting linguistics in terms of biological metaphors and created a ‘disciplinary matrix’ for a linguistics founded upon the natural sciences. Linguistics increasingly came under the influence of positivism in the late nineteenth century.

3.3.1 Planert

Wilhelm Planert (b. 1882) claimed to be ‘scientific’. In his inaugural dissertation at the University of Leipzig, Planert (1907a) claimed: “In this treatise, for the first time, an
attempt is made to correspond to the intentions of modern linguistics”. Planert was a student of Carl Meinhof (1857-1944), professor at the School of Oriental Studies in Berlin from 1905. Meinhof was involved in developing the Language Institutes (Seminars) as ‘Hypermetropolitan spaces’, laboratories where phonetic and linguistic information could be easily extracted from informants (Pugach 2012: 138). Languages were recorded with phonographs, played back and ‘observed’. It was that ‘the new discipline of phonetics recast linguistics as a natural science, distancing it from humanistic philology by refocusing attention on ‘bodies and the sounds they produced instead of written texts’(Pugach 2012:93).

Planert’s usual method of operation at the Oriental Institutes was to interview language speakers who were visitors to Germany. He was limited to working in the metropole and the laboratory away from the context of language use. Planert (1908) acknowledged in a response to Carl Strehlow’s criticisms of his Aranda Grammar that errors were made because of a lack of reliable informants and he was disparaging about the training of Missionary Nicol Wettengel who was his informant for the Aranda Grammar (Planert 1907b). Wettengel had worked at Hermannsburg in the Northern Territory of Australia from 1901-1906 (J. Strehlow 2011: 1154) and gained some familiarity with the Aranda language. Planert worked with an informant who was not a native speaker of Aranda and who had a less than adequate grasp of the language.

Languages were manipulated to serve colonial goals (Errington 2008:88). The nation required a “school-mediated, academy-supervised idiom codified for the requirements of reasonably precise bureaucratic and technological communication” (Gellner 1983:57). Planert’s PhD dissertation was published as *Syntactic relationships in Swahili* (Planert 1907a). Swahili was a language of administration which the German colonists elaborated into a language of ‘civilization and progress’ to rule East Africa. Planert also described Bushman and Hottentot (1905), Nama (1905) and Jaunde (Nekes 1911)32. While the Germans were conducting a genocidal war against the Nama and Herero peoples in South West Africa (Hull 2005), Planert was writing his grammar of the Nama language. He collaborated with the colonial authorities in language engineering and control, in contrast with the moderate positivists who had very little to do with colonialism or were even opposed to it.

32 A language used in the German colony of Kamerun (Cameroon) and now written as ‘Ewondo’.
4 Conclusions

Researchers from a wide variety of metascientific orientations attempted to understand the ‘Other’ through their languages. There are strong similarities between moderate positivists, general linguists and missionary linguists. That they corresponded about the study of Australian languages is evidence of this affinity, reflecting language ideologies from the German philosophy of language.

Kenny’s assertion that the ‘humanism of German anthropology with its pluralistic outlook and anti-evolutionistic position lasted nearly to the eve of World War I’ fails to explain Klaatsch’s evolutionary anthropology. The views of Basedow, Eylmann and Planert reveal the degree to which Antihumanism had, in fact, become established and dominant in German Ethnology. There was more in common between researchers of different nationalities who shared a similar orientation than those of the same nationality who had different philosophical orientations. It would be most accurate to say that Strehlow had little sympathy for those contemporaries who saw research in a very different way, anthropologists whose primary metascientific orientation was Antihumanist, including other Germans.

The critical difference between the missionaries and the Antihumanists in the Central Australian field was that the missionaries could understand the ‘Other’ through the strong focus upon language of their humanist training. Positivist interpretations were often hampered by literalism and misunderstandings. Although claiming to be ‘scientific’ and objective, they were often biased through their support for pre-existing theories and their affiliations to colonial forces. Significantly, missionary research filled in gaps in the knowledge of Central Australian languages at a time when neither anthropology nor comparative philology took an interest in the languages of Australia. Further research on these rich sources is needed to understand missionary research, language ideologies and experiences of fieldwork.
References


Alice Springs: IAD Press.


The translation of words

Preface

The following two papers examine words from Central Australian languages and their translation and use as key terms. The most famous of these words *Altjira* was appropriated by Lutheran missionaries and British anthropologists, which inevitably led to conflict between them as they argued about the meaning of the word. I discuss the translation of some key terms by missionaries in Paper 1 and show that Carl Strehlow replaced many of Kempe’s foreign key terms with Aranda words. I discuss a syntactic shift that occurred when *Altjira* was used as the term for ‘God’. This appropriation is further discussed in Paper 2 where I discuss the disparity between Strehlow’s dual roles as a missionary translator and researcher.

The purpose of Paper 3 *The Wanderings of Altjira and the translation of sacred words in Central Australia* was to discuss translation issues more generally and to specifically discuss the problematic nature of the choice of *Altjira* as the theological key term for ‘God’. Although used by Heinrich and Tjalkabota in the 1924 Aranda hymn book supplement, the equivalent Luritja word *Tjukurpa* was rejected by speakers half a century later during the translation of the New Testament into Luritja. In fact, of words from three languages in Strehlow’s dictionary (2018 [1909]: 164) only *Altjira* acquired the theological sense ‘God’. The Dieri word *Mura* was not adopted by the missionaries at Lake Killalpaninna.

In an earlier paper *Altjira, God and Dream* I was concerned with the difficulties of establishing the meaning of words and argue that the adoption of ‘dreaming, dreamtime’ resulted from an attempt to create an anthropological key term. The ‘Dream’ etymology
was developed and promoted by Victorian anthropologists who had an *a priori*
commitment to representing Aboriginal people as primitive and lacking in religion. I
highlight the distinction between word meaning and etymology, and emphasise that care
must be taken with the translation of words from Aboriginal languages.

**References**

Aranda, German, Loritja and Dieri to English dictionary with introductory essays.*
Translated and edited by Anna Kenny. (Monographs in Anthropology Series)
Canberra: ANU Press.
The Wanderings of Altjira, Christianity and the Translation of Sacred Words in Central Australia

David Moore

Abstract

German missionaries working in Central Australia were cultural translators who had a strong grounding in philology, a discipline which developed in Germany to a high standard throughout the nineteenth century. The missionaries aimed to translate the Bible and hymnbook containing Luther’s Small Catechism, hymns and prayers, into the Aranda language. Their adoption of Altjira for ‘God’ was radical considering the literalness of their translations and their wariness of syncretism. Soesilo (2007: 176) maintains that “the acceptable translation of divine names is an area of debate in Bible translation in many areas of the world” as “there are missionaries and Christian workers who think that adopting local divine names can lead to confusion and syncretism.” Given concerns about syncretism and considering that Kempe usually borrowed Latin terms for key theological terms, it is surprising that he chose Altjira as the term for ‘God’. Over time Altjira has changed meaning and is now different from the one prior to European settlement of Australia. Changes in meaning are also found in other languages, where meanings have diverged in different ways. [Altjira; Arandic languages; literal translation; interlanguage; loanword]

1 Introduction

Europeans sparsely settled the Central Australian frontier from the 1870s onwards. The

---

I thank Donald Kemarr Thompson, Frank Kemarr Holmes and other men at the arnkenty men’s camp at Ampilatwatja who have informed my understanding ofAltyerr. I also thank John Henderson and Marie-Eve Ritz, my academic supervisors, and Maia Ponsonnet for valuable feedback on this paper at the University of Western Australia. I would also like to thank James Cox, Adam Possamai, Ken Hansen and Garry Stoll for many enlightening discussions on indigenous religion and language, and the organisers of the Stirling Colloquium who invited me to give this paper in December 2015.
Aboriginal people of this region were hunter-gatherers who lived in small bands, and the first contacts with European settlers were with explorers, cattlemen and missionaries. To the west of the Aranda and Luritja, the last of these Aboriginal groups to encounter western influences were the Pintupi (Myers 1986: 11), almost a century after the establishment of the Hermannsburg Mission Station. In this context, around the turn of the nineteenth century into the twentieth, the first efforts to translate Christian texts into Central Australian Aboriginal languages were made by German Lutheran missionaries who tried to convey the Christian doctrine through Aranda (written ‘Arrarnta’ or ‘Western Arrarnta’ from the 1970s) and a neighbouring language, the Western Desert language Pintupi-Luritja (see Map 1).

In “Altjira, Dream and God” I explored the way in which Dreaming wandered from its limited geographical origins in Central Australia (Moore 2016). Altjira was translated as Dreaming by the settler society (Wolfe 1997: 82) which was intended to reinforce the theory that Aboriginal societies had magic rather than religion (Gillen 1901). Dreaming was a key term of social evolutionist anthropology which outlived the ethnographic matrix of its creation and became a key term in local and Australian English varieties of secular mainstream and pan-Aboriginal Australia. For different languages, words which originally had similar meanings have diverged in different ways to take on a range of meanings in different dialects and languages. These terms involve the extension of meanings as a result of semantic change which reflects rapid cultural change following the colonisation of Australia.

The translation of Altjira as ‘God’ shows the problematic nature of translation of the terms when languages come into contact. Although controversy about the meaning of Altjira has raged between non-Indigenous researchers for a century, we have not heard the Indigenous arguments about its meaning. A century after the initial translation of Altjira in Aranda hymns there were discussions about the key term for ‘God’ in Pintupi-Luritja. The word Tjukurrpa (equivalent to Aranda Altjira) was seen by Pintupi-Luritja speakers as inappropriate for the translation of ‘God’. This paper highlights the uniqueness and the problematic nature of that translation choice.

Whilst the spread of Dreaming was based upon an interlanguage which developed at the frontier, the development of religious key terms has been intentional, although not all of them have been accepted. I explore Central Australian missionary translations as collaborative works and explain how Altjira became established as a key term of Christianity in the Aranda language, examining reasons why it was accepted as the key
term for ‘God’ for some languages and not for others.

2 Beginnings: the Hermannsburg Mission

German Lutheran missionaries working in Central Australia were cultural translators with a strong grounding in philology, a discipline which emerged in Germany in the Reformation and developed throughout the nineteenth century (Moore and Ríos Castaño 2018). They aimed to translate the Bible and hymnbook containing Luther’s Small Catechism, hymns and prayers into the Aranda language. The Hermannsburg Mission Institute in Lower Saxony in Germany sent the first missionaries to Central Australia (Harms 2003: 121). Hermann Kempe and Wilhelm Schwarz arrived in 1877 and were joined by Louis Schulze in 1878. They established the Hermannsburg Mission station in Central Australia, and Kempe published a worship book in 1891. After many crises and disappointments, the missionaries left Hermannsburg in 1891 and were succeeded by temporary caretakers until the arrival of Carl Strehlow (1871–1922), a missionary who was trained by the Neuendettelsau Mission Institute near Nürnberg in Franconia (Harms 2003: 153). He had arrived in Australia in 1892, initially learning the Dieri language at Lake Killalpaninna and translating the New Testament from biblical Greek and German into Dieri with J.G. Reuther, before moving to Hermannsburg in 1894, where he continued to work on the Dieri translation. The first translation of the New Testament into an Australian Aboriginal language (Schild 2004: 55) was the Dieri New Testament which was published in 1897.

After the Hermannsburg mission was established, the first task of the missionaries at Hermannsburg was to find theological key terms. Many of their key terms were makeshift and appear to have had a place-holding function until more suitable terms were found. Strehlow gained over a decade of experience in translation before he made the Aranda hymnbook revision and was well aware of the untranslatability of many terms between Aboriginal languages and German.

Carl Strehlow’s arrival heralded the beginning of a new era at Hermannsburg. He had a dual role. While translating the Lutheran hymnbook into Aranda, he was also translating Aranda and Loritja myths, legends and tales into German. His collaboration with Freiherr Moritz von Leonhardi (1856–1910) resulted in the publication of Die Aranda- und Loritja-Stämme in Zentral-Australien [The Aranda and Loritja Tribes in Central Australia], a
comprehensive collection of texts, songs and culture descriptions published in seven parts (Strehlow 1907–1920). As a missionary translator, he had retained the use of *Altjira* for ‘God’. A word with a similar meaning to *Altjira* in the Dieri language, *muramura* (Kneebone 2005: 115), was not adopted for ‘God’. Strehlow must have been aware of this decision, as he continued to work on the translation of the Dieri New Testament at Hermannsburg. Carl Strehlow’s translation philosophy was to make as few changes as possible from the work of his predecessors. In the translation of the Gospels, Strehlow replaced *Kiria* (Kempe 1891) from Κύριε/Kyrie [Lord] in New Testament Greek with *Inkata*, an Aranda word used to indicate a ceremonial leader (Kenny 2013: 252). Strehlow was constrained in the changes he was able to make when he revised Kempe (1891) and published his revised hymnal in 1904 because his informants insisted that he translate into their own dialects of Aranda, that is, the Aranda *aratja* ‘right’ dialect rather than the Aranda *ulbma* dialect (J. Strehlow 2011: 739), reflecting prescriptive language ideologies which were held by Aranda speakers. Missionary Wettengel’s opposition to Strehlow’s changes to the hymnal led to Wettengel’s departure from Hermannsburg and return to Germany (J. Strehlow 2011: 871). His criticisms of Strehlow were conveyed to the Berlin-based linguist Wilhelm Planert (1908: 703) who claimed that Strehlow’s 1904 hymnbook contained “very little classical Aranda” and that the Aranda people themselves were not able to understand it. There seems to be little basis for this criticism as it is apparent that Strehlow had actually replaced Kempe’s loanwords with Aranda words (see Section 4) and also corrected grammar.

3 Controversies and challenges of translation

Meaning in language is often indeterminate in that even speakers of the same language can experience difficulties with ambiguity, generality and vagueness. Translation from one language to another increases the indeterminacy and potential for miscommunication. Words for ideas and values are often untranslatable between languages (Williams 1985: 16), and are often not translated (Apter 2014: vii). Despite indeterminacy and the failure of translations to convey source language meanings accurately, there is often the mistaken belief that a word in one language can be translated by a single word in another language. The challenges of translation become especially evident in contact situations where interlanguages can arise. These are “language systems created by someone learning a second language which contains the properties of both the first and second languages according to the learner’s system of rules” (Crystal 1992: 308), and they develop along
linguistic frontiers (Cooke 1998: 42). The missionaries were learning Aranda but would have spoken a kind of interlanguage, a learner’s Aranda while Aranda speakers adopted words of English. It was therefore natural for words to develop new meanings in the interlingual frontiers of Central Australia.

3.1 Pepa

An example of a word from the linguistic frontier is the Aranda word *pepa*, a loanword from English ‘paper’ which means ‘paper, book, letter, document or church service’ (Oberscheidt 1991: 161; Breen 2000: 46). The association of Christian worship with hymnbooks led to the adoption of *pepa* to mean ‘worship’ (Hansen 1983: 22) and describes “a Christian service and the books used” (Hansen and Hansen 1992: 106). *Pepa* can have a secular sense of ‘document, form, letter, report’ and numerous other translations related to English ‘paper’; for example, Roennfeldt et al. (2006: 70) use it for ‘book’. The missionaries translated religious literature such as Luther’s *Der kleine Katechismus* [The Small Catechism] (Luther [1529] 2012), hymns, prayers and Bible passages into the Aranda language of Central Australia. The strong connection with the key documents of the Protestant Reformation, the Bible, hymnbook, and literacy and education that were integral to Lutheran religious practice was therefore key to the acceptance of *pepa* as a useful metonymy.

In contrast *tjurunga* is untranslatable by any single word in English and has only religious connotations, describing sacred objects (Breen 2000: 60) and associated ceremonies. Rather than assuming “a related meaning to *tjurunga*” (Kenny 2013: 127), the similarity between *pepa* and *tjurunga* is that they are both purported to be metonymic. Evidence is lacking for Kenny’s claim for *pepa* that “in the course of the twentieth century its meaning seems to have solidified, relating to Christian *tjurunga*” (2013: 128). The adoption of *pepa* does not mean that ‘the Arrernte became Christian by rendering Christianity in an Arrernte way’ as Austin-Broos claims (2003: 312), rather that *pepa* developed as a term in a religious interlanguage to describe something new based upon sense relations between physical and metaphysical referents, the metonymic extension of meaning (Cruse 2004: 209). This change in meaning of *pepa* would have been quite unintentional on the part of the missionaries and shows the extent to which loanwords are assimilated into a language as speakers of different languages assume a mutual understanding of shared terms.
3.2 ‘Sacred’

The word *mek-mek* was used for the title of a Northern Territory Government report *Ampe Akely-rnemane Mek-mekarle, The Little Children are Sacred*, based upon its mistranslation as ‘sacred’ (Moore 2016: 95). In the translation, it was supposed to mean ‘inviolate’. But *mek-mek* is untranslatable by a single English word. It refers to a sacred site or ceremonial ground to “which certain people, especially women and children are not allowed to go near” (Henderson and Dobson 1994: 114). The Western Arrarnta dictionary defines the word as “secret/dangerous place or site” (Oberscheidt 1991: 115). Collocations are conventional combinations of words and include compounds and idioms. *The Little Children are Sacred* is a ‘collocational clash’, a translation error (Beekman and Callow 1974: 166) involving a semantically unacceptable placement of words in a way that makes no sense to speakers. The equivalent term to *mek-mek* in Pitjantjatjara *miil-miil* is defined as ‘dangerous and prohibited, sacred’:

*Tjanampa miil-miil mula nyaratja*

3PL sacred real there

“Their sacred objects are stored over there” (Goddard 1992: 66).

The use of *makamaka* for ‘glory’ (Albrecht 2002: 194) in the Western Arrarnta Bible (Bible Society 1997: 304) is a deliberate attempt to introduce a key term with sacred associations in the translation of Isaiah 6:3:

*Alha njapara makamaka ekura nama*

Ground whole ‘glory’ 3S-DAT be-PRES

“His glory fills the whole earth”.

Translator Paul Albrecht (1997) aimed to convey the notion that ‘the whole earth is God’s taboo place, a place of significance because of God’s presence’. In other parts of the translation *makamaka* specifically refers to ‘sacred sites’ or ‘holy places’, for example, in the translation of Exodus 3:1:
“Horeb, that was God’s sacred mountain”.

Albrecht seemed confident that the word would be accepted as the Arrarnta term for ‘glory’, replacing a previous word alkaralkara, “glorious, bright (as the sky)” (Oberscheidt 1991: 2) and “clear, transparent, like a clear sky” (Henderson and Dobson 1994: 93) which the missionaries adopted as the term for ‘glory’.

By the time of the 1997 Arrarnta Bible translation there was a recognition of the unreality of some of the terms. While the translation was being tested, there were problems with “slipping into theological jargon” and “English-isms” (Albrecht 2002: 195). These were a result of the translation process itself. Indigenous Arrarnta speakers appear to have had a marginal role in the process of checking and verifying the translation.

The accretion of key terms over generations has led to their naturalisation within the limited domain of the Church but also appears to have had a limited overall impact upon the language. In general terms, the effect of translation was to create a separate language, one that would be accepted within the domain of the Church but not understood or used outside it. By 1997, when the Western Arrarnta Bible was published, there was an apparent acceptance of these unusual ways of speaking in indigenous societies. In a similar way, many indigenous languages have special registers for avoidance and respect. For example, the language of songlines contains archaic words that cannot be understood unless they are explained. In a similar way, the language of the Church became a sacred language, understood only by the initiated, showing that capturing the meanings of the individual words has been less important than participation in the ceremony. The Reformation principle of perspicuity and the language ideology that sacred language needs to be understood by all was subordinated to a language ideology of songlines and word meanings which have no currency outside of the ceremony.

4 Language change

I argue that translation is a cause of language change and the origin of interlanguage, as becomes evident when a term is given a novel meaning which corresponds to a term in the source language.
Terms have been borrowed; for example, *Churinga* (Spencer’s spelling of *tjurunga*, ‘sacred object’) has been used to name apartment blocks and shopping centres. This appears to have been done without any understanding of what the word means in its traditional context.

This process of language change occurred deliberately through the translation at the Hermannsburg Mission. The hybrid situation (Cohen 2016: 113) led to terms which were widely accepted and gained currency. An interlanguage developed in the Lutheran mission in which Aranda terms were adopted, taking on specific meanings in specific contexts. However, many terms were not widely accepted or only in the ecclesiastical domain, among the Hermannsburg missionaries and evangelists. Some terms became obsolete. These included *Efangkelia* ‘Gospel’, ‘good news’, from Greek via German, a term that was clearly alien and which was replaced with *yia marra*, ‘good story’.

### 4.1. Abstract nouns and nominalisations

Terms were created to cover abstract nouns which had no equivalents in Aboriginal languages. Aboriginal languages have very few abstract nouns (T. G. H. Strehlow 1944: 69; Dixon 1980: 272). The missionaries created terms by nominalising verbs, as shown by the following examples from Oberscheidt 1991:

<table>
<thead>
<tr>
<th>Aranda source verb</th>
<th>Abstract noun</th>
<th>translation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>nama</em> ‘to sit, to be’</td>
<td><em>nintja</em></td>
<td>‘being, existence’</td>
</tr>
<tr>
<td><em>nentilama</em> ‘to explain’</td>
<td><em>nentilintja</em></td>
<td>‘explanation’</td>
</tr>
<tr>
<td><em>naamalhelama</em> ‘to cause to move, shift’</td>
<td><em>naamalhelintja</em></td>
<td>‘removal, deportation’</td>
</tr>
</tbody>
</table>

These abstract nouns developed in the Church context and are not used in others, thus having no independent existence.

### 4.2 The conversion of sacred terms

Another method of developing key terms was the process of zero derivation (Moore 2015: 3) or conversion (Cruse 1986: 132; 135 footnote 15), that is, changing the function of the word, from a describing or attributive meaning to one in which it represented a quality. The
term for ‘peace’ was derived from *ngwanga*, defined as “non-belligerent, quiet, merciful” (Oberscheidt 1991: 133). Australian languages do not distinguish adjectives from nouns on structural grounds, as they occur with the same grammatical markers and share the same grammatical properties. Often a word with an attributive function can stand alone as a noun, for example, in Eastern Arrernte *akweke* ‘small’ can stand alone as ‘the small one’. However, the shift from nominal to abstract noun is more radical, creating a term for a referent and a usage that is not found in the traditional language.

4.3 Sacred places

Missionaries developed key terms by taking sacred terms from an Aboriginal language to use it in the Christian context. Strehlow was cautious about the adoption of new terms which were taken from Aboriginal religion, although he replaced many of Kempe’s classical language borrowings with Aranda-derived terms (Moore 2015: 44). For example, *arknanaua* was too culturally specific to use for ‘church’, as it referred to a storehouse of sacred objects that uninitiated people were forbidden to visit (Moore and Ríos Castaño 2018: 337–338). The analogy with a church building was not accepted by his informants (C. Strehlow 1907–20: 73) because mentioning a restricted and off-limits location would be regarded as sacrilege, resulting in serious consequences for uninitiated people. Thus, Strehlow dropped the use of the term “because the blacks associate too many heathen perceptions with the word arknanaua” (ibid.). He chose instead the more general term *ilta* for ‘Haus’ or ‘Hütte’ ['house’, ‘hut’]. In fact, relatively few terms appear to have been borrowed from Aboriginal religion to serve as key terms of Christian religion. The use of *tjurunga* was probably never considered and appears not to have been used in the Western Arrarnta translation, probably because it is culturally specific. Rather than referring to Aboriginal religion in a general way, it has specific reference, which as Strehlow recognised, is not readily transferrable to other contexts.

5 The translation of God: *Altjira*

One of the earliest terms that the missionaries sought was one for ‘God’. Much of their questioning of Aboriginal informants would have been about Aranda beliefs concerning the existence of God, and whether or not they had a word for God. The word *alxira* (an earlier spelling of *Altjira*) was used from around 1880 in hymn translations. The
Hermannsburg missionary A.H. Kempe had described it in his report to the mission board:

They call this alxira and attribute to him the creation of the sky and the earth; they say too that he lives in the sky and is well disposed to humanity, or at least doesn’t cause them any ill (Kempe 1881: 55).

Schwarz (1881: 74) reports that the Hermannsburg Christian congregation sang the hymn *Alxir alkiela* at Christmas, and the term appears throughout the 1891 hymnbook. Of the 53 hymns translated by the missionaries which appear in the hymnbook (Kempe 1891), 36 hymns contain *Altjira* as the translation for ‘God’. Clearly, the Hermannsburg missionaries were using the term soon after their arrival in Central Australia. Whatever they may have said later about its translation, there can be no doubt about their early commitment to the use of the term.

However, disagreements about the translation of *Altjira* occurred among translators and Aboriginal Churches. Their adoption of *Altjira* for ‘God’ was radical considering the literalness of their translations and their wariness of syncretism. Considering that Kempe usually borrowed Latin terms for key theological terms, it is surprising that he chose *Altjira* as the term for ‘God’. Some idea of the complexity of *Altjira* was given by T. G. H. Strehlow (1971: 614–615):

*Altjira* as a word is difficult to translate into English and there were disputes about how to translate it in the early twentieth century. ‘altjira’ is a rare word whose root meaning appears to be ‘eternal, uncreated, sprung out itself’ and it occurs only in certain traditional phrases and collocations.

*Altjira* is a highly controversial word, translated differently by researchers who were polarized in their metascientific orientations. Given the indeterminacy of language and difficulty of translation, it is not surprising that there would be strong disagreements about the translation of *Altjira*. The views of the English biologist and ethnographer Walter Baldwin Spencer (1860–1929) were based upon his training in the natural sciences. He embraced a positivist philosophy of science which encouraged literalism. He sought a literal translation for *Altjira* which would yield a ‘core meaning’ based upon an etymological connection with ‘dream’ (Moore 2016: 88). The untranslatability of *Altjira* was not apparent to him. He contrived sentences which showed the invariant translation ‘dream’ (Spencer and Gillen 1927: 306). An interlanguage developed in which neither side fully understood each other and misunderstandings occurred regularly. Just as ‘false friends’ arise between related languages, so *Dreaming* arose based upon the translation of a term which had different functions in different linguistic and cultural systems, leading
to miscommunication between Aranda first-language speakers and monolingual English-speakers. The term spread through mistaken European notions of pan-Aboriginality and the use of *Dreaming* by Aboriginal English speakers. Spencer and Gillen assumed that the self-evident and naturalness of *Dreaming* as a translation was confirmed because it was used by Aboriginal people. Many words result through *miscommunication* that is contrary to the original intention of the speaker and even unknown to them as they are adopted by speakers of the receptor languages who have not fully understood its meaning in the source language but have adapted the word for their own purposes. *Dreaming* is a clear example of this misunderstanding. The term creates dissonance. *Dreaming* is disliked by many Aboriginal people who think that Aboriginal culture is portrayed as vague and unreal, especially when reinforced by the negative meanings which have become attached to words such as ‘myth’ and ‘mythic’ with their usual connotations of ‘untrue’ for English speakers.

5.1 Collocations

In collocations *Altjira* occurs with other words which delimit its meaning. With the following collocation *altyerr-altyerr* and the verb *angkerl-anem* may occur sequentially or may be separated by other words but *angkerlanem* is necessary to understand the meaning of *altyerr-altyerr*:

*Altjira*  

*altyerr-altyerr angkerl-anem*  

‘(he) talks continuously in his sleep’

In certain constructions such as *altjira rama*, ‘to dream’ (Moore 2016: 88), it forms a minimal semantic constituent with the verb *rama*, ‘see’. If the verb *rama* is deleted from *altjira rama*, then *altjira* no longer means ‘to dream’ as the minimal semantic constituent is non-compositional.

5.2 Definitions and their limitations

Definitions of *Altjira* in recent Arandic language dictionaries have created the impression that *Altjira* is polysemous. Polysemy is comparatively rare (McGregor 2009: 137). It is simplistic to analyse *Altjira* as polysemous, but this understanding is inevitable when different contexts of use are not considered. Rather *Altjira* represents an untranslatable referent for which a number of approximate translations or ‘guesses’ have been made in
the form of single English words, of which none is a fully adequate translation on its own. These could be regarded as a ‘refractive’ approach to translation, which means that various translations are given in the target language in the hope of capturing some of the range of meanings of the word (Gipper 1986: 119). The *Introductory Dictionary of Western Arrernte* (Breen 2000) appears to take the ‘refractive’ approach, defining (s.v.) *altyerre* as ‘Dreaming; dream; God’, suggesting that all three senses of the word could be used by speakers. These senses are limited to particular contexts but the dictionary contains no example sentences for the entry to give the contexts in which these senses are used.

The treatment of *Altyerr* (*Altjira*) as polysemous is seen in the Anmatyerr to English Dictionary (Green 2010: 58) in which ‘television’ is listed under *altyerr* instead of being listed under *altyerr arem* ‘to dream’ (verb) as though *altyerr* meant the physical ‘television’ set and not the natural extension of verbal *altyerr arem* to the ‘seeing of television’ which could be seen as analogous to the act of ‘dreaming’.

The identification of *Altjira* with *Dreaming* was opposed by Strehlow and led to a controversy which continues at the present time. Carl Strehlow claimed that Aranda people would not say ‘to have a dream’. Rather the complex form *altjira rama* is translated better by ‘to dream’ as a verb. We cannot say that *altjira* can be translated as ‘dream’ as in every case, it has the more complex and untranslatable sense of ‘time before people who are living now’.

In Spencer’s view *Altjira* as ‘God’ could only have existed because it was taught to Aboriginal people at the mission and not because its translation as a religious key term was salient or plausible. The traditional meaning of the word remained within the broader Aranda speaking community, but among the Christian Aranda community *Altjira* took on a new meaning in the Church interlanguage and was accepted as the term for ‘God’.

Over time *Altjira* has changed meaning and now, in some language communities, it has a different meaning to that prior to the European settlement of Australia. For different languages, words which had similar meanings, now have meanings which have diverged. The Hermannsburg missionaries were the only translators in Central Australia to adopt *Altjira* for ‘God’. This reflected a Lutheran preference for using an indigenous term rather than a loanword ‘Gott’, ‘God’ or ‘Deo’ which was adopted elsewhere in Oceania (Capell 1969: 156).
5.3 Syntactic and semantic shift

Let us now look at one of the difficulties of using *Altjira* as a key term for ‘God’.

The translation of *Altjira* as ‘God’ involved a significant semantic and syntactic shift (Moore 2015: 45). Traditionally *Altjira* referred to ancient times of creation, and the essence of tradition and Aboriginal religion. It is often invoked as an explanation, as to why a state of affairs has come about and this is like Stanner’s ‘charter’, not so much as a way of guiding behaviour but as an explanation or ontology of how things came to be the way they are:

*Altjiranga* is commonly given as the answer to questions about the origin of the world. Thus, according to the Aranda, the earth and the sky have existed *altjiranga*, or as we might say, they have existed “in the beginning”, meaning thereby that nothing preceded them (T. G. H. Strehlow 1971: 614).

Similar meanings have been found for related words in the Arandic languages and the adjacent languages of Central Australia.

*Altjira* still has its original meaning in the Alyawarr language. In *Artnwer* ‘Desert Dingo’ (CAAMA 2016) the narrator explains that Sacred trees *arnenty* are *Altyerr-penh*, from the Creation time. The trees are unlike ordinary trees, because they involve characters from the Creation time turning into objects in the landscape. The physical landscape is where these beings now live, for example the Kwerrenarr or Rainbow Snake:

\[
Aleyarl \quad ra \quad aneyel \quad Altyerr-penheley \quad innganem
\]

Now 3S be-PRES Creation-from-LOC-EMPH real-THEN

“It came from the *Creation* and really lives there now”.

*Altjira* was not traditionally spoken of as animate. In Aranda grammar, an agent is marked with a suffix which indicates the ergative case or agent of a transitive sentence:

\[
Artwala \quad ura \ ngkwaltja \quad kutjima
\]

Man-ERG kindling collect-PRES

“The man is collecting kindling wood” (Roennfeldt 2006: 62).

---

34 A documentary produced by the Central Australian Aboriginal Media Association (CAAMA).
**Altjira** has now become the word for ‘God’ in the Western Arrarnta language and some adjacent languages, replacing its earlier meaning (Green 2012: 171). Most noticeably, this involved a change in animacy and agency, indicated with the ergative case marker -la which also has locative and instrumental functions. The following example from Kempe’s grammar shows that **Altjira** was being used with an agent marker to indicate that **Altjira** had agency:

```
Altjiralalajinganaetatantema
God-ERG (to) me-ACC life give-PRES
```

“God gives me life” (Kempe 1891: 9).

(ERG marks the Agent of a transitive clause. ACC is the Accusative Case, indicating the direct object of a transitive clause).

To use the -la suffix with **Altjira** involved making a syntactic change. Unless -la was interpreted as a locative marker (which it is homophonous with), this would mean a change in the way that the word was used traditionally. This probably would have jarred with speakers of the language and must have been difficult for them to understand as an innovation which was radically unlike what they had said previously.

**Altjira** is a grammatical Agent, occurring in transitive sentences which have a direct object, marked by the Accusative case. This syntax is not found with **Altjira** in its traditional use which does not occur with the Ergative case marker (marking the Agent of a transitive clause) and is clearly distinguishable from **Altjira** (‘God’) on syntactic grounds, which is evidence that, rather than being analysed as polysemous, these two **Altjira** should be analysed as different words (see 5.1.2).

### 5.4 Theological correctness

I make the case that missionary translations were also constrained by concerns about syncretism (Moore and Ríos Castaño 2018). Missionary research was often limited by the attitudes of the religious authorities which largely viewed indigenous religions as ‘heathen’ and feared syncretism. At the beginning of the twentieth century missionary Siebert, for example, was criticised by the Lutheran Mission Committee chairman Gustav Rechner for allowing his research to interfere with his missionary duties and “trying to impress the truth
of salvation on the blacks using the medium of their heathen perceptions” (Nobbs 2005: 32). Siebert’s letter in response to the Mission authorities in Adelaide (dated March 28, 1900), however, justified his research, not as disinterested scholarly work, but in terms of its practical usefulness to missionary translations and totally commensurate with good missiological practice. This shows that missionary translations were also constrained by concerns about syncretism (Moore and Ríos Castaño 2018: 339).

5.5 Missionary views

Soesilo (2007: 176) maintains that “the acceptable translation of divine names is an area of debate in Bible translation in many areas of the world” as “there are missionaries and Christian workers who think that adopting local divine names can lead to confusion and syncretism”. This characterises the opinion of Presbyterian translators Ron Trudinger and J. R. B. Love who decided that they would not use Tjukurrpa for God in their Pitjantjatjara translation: “In the rendering of the sacred name I long ago came to the conclusion that it is not safe to use a native word for ‘God’ ” (Rainey 1947: 37).

The objections were theological: “But many of their (Pitjantjatjara) myths ascribe the creation of various features to animals and birds. And God cannot share the creation with his creatures.” (ibid.). The translators also thought that “the actions of their mythical heroes are not consistent with the character of God.” They eventually decided to adopt a loanword: The translators decided that although “we should never pour ridicule or contempt on the tribal beliefs, we must recognise that, with the Gospel, we are bringing them something new, for which a number of new names are indispensable” (ibid.). In this era translators were making decisions for Aboriginal Christians and this is evident with the translation of the Aranda hymnbook, for example:

Before the final revision of the Hymnal was commenced, the native elders at Hermannsburg were consulted. They expressed agreement with the plan, and advised that the final decisions as to form and idiom be left to Mr. Strehlow (Loehe [1965] 1988: x).

Strehlow’s traditional approach to translation was encouraged by the British and Foreign Bible Society which discouraged additions or deletions to the text and was reluctant to accept idiomatic translations (Zogbo 2009: 24).
By the 1950s the Lutheran Mission had done more linguistic and translation work than any other mission in Central Australia and influenced other missions. In the 1950s, there were close links between the Hermannsburg Lutheran Mission and the Santa Teresa Catholic Mission. As Green (2012: 171) reports, “once the term altyerre was clearly established as a translation for ‘God’ by Lutherans in the Western Arrernte region, other mission personnel were keen to use it amongst Eastern Arrernte speakers at the Catholic Mission at Santa Teresa”. Green cites Veronica Dobson Perrurle, Arrernte speaker and co-compiler of the Eastern and Central Arrernte to English Dictionary who claimed that “Father Tom Dixon asserted with conviction that the word altyerre meant ‘God’ and not ‘dream’.” Dixon learned the Eastern Arrernte language and was familiar with T. G. H. Strehlow’s grammar and Aranda New Testament translation.

Austin-Broos (2003: 314) documents the transfer of secular authority at Hermannsburg from the missionaries to government in the 1970s and 1980s. Her judgement of the apparent decline of the usage of pepa, ‘worship’, fails to recognise the acceptance and spread of Christianity among Aboriginal people in Central Australia and the translation of Bibles and hymnbooks for a Church which now consists of a large number of Aboriginal pastors and congregations in Central Australia (Albrecht 2002: 203). It was at the time of the spread of Lutheran Christianity that new developments occurred in translation. A new orthography was developed in the 1970s and the new Western Arrarnta Bible was translated. Moreover, the Western Arrarnta liturgy was translated into four other languages of Central Australia (Albrecht 2002: 160). In 1988 the Aranda hymnbook was retranslated and then Luther’s Small Catechism and liturgies of the Church were translated into the languages because the Western Arrarnta text should then be used as basis for the other translations (Albrecht 2002: 159). The languages to the north of Alice Springs which belong to the Arandic group35 are noticeably different from Western Arrarnta. Following mission policy, Paul Albrecht translated the Catechism and liturgies into Alyawarr, Eastern Arrarnta, Anmatjirra and Wailbiri, completing his work in 1985. (Albrecht 2002: 160.) It seems, though, that the translation into the northern Arandic language varieties was made mechanically and that the focus was on finding equivalent

---

35 The Arandic language group includes Western Arrarnta, Eastern Arrernte, Pertame, Lower Arrernte, Anmatyerr, Alyawarr and Kaytetye (Henderson and Dobson1994: 8).
terms in the languages and translating directly from Arrarnta. The translations were later revised to adapt them to the changes which had been made to the Western Arrarnta texts, aligning them deliberately with Western Arrarnta in order to reduce confusion across language boundaries when Aboriginal Christians were to meet to worship and study together (Albrecht 2002: 160, 191). For Anmatyerr and some Alyawarr people this seemed to be a fairly natural transition. Those groups spoke Arandic dialect, but not Western Arrarnta (Albrecht 2002: 159) which was the language of Lutheran worship, and their languages were related to Arrarnta, even if the ecclesiastical language was largely unintelligible to them. They had close links to the mission and a long history of evangelisation by Arrarnta-speaking evangelists. The result of this policy was to transfer some of the Western Arrarnta literalisms into the Anmatyerr, Eastern Arrernte and Alyawarr liturgies, and Altjira was adopted as the word for ‘God’ in those Arandic languages in the Church context while also retaining its traditional meaning in Aboriginal religion.

6 The Western Desert experience

The Western desert is a vast area in which mission stations had made few inroads even in the 1920s when the Hermannsburg mission was celebrating its fiftieth anniversary. It was only in the 1930s that a Presbyterian mission was established at Ernabella among speakers of Pitjantjatjara, a Western Desert language variety that is related to Luritja36 (see Map1). The ceremonial life of Western Desert people continued during an era in which missionaries were more inclined to be tolerant of traditional practices. Apart from traditional reasons, there were also Christian ones for opposing the use of the term.

6.1 The Luritja translation

Aranda was the language of the traditional landowners at Hermannsburg, and Luritja was the Western Desert language variety of those who had migrated from the west (Holcombe

---

36 Pintupi (Hansen 1983) is a Western Desert language to the west of Luritja. The languages are often referred to as ‘Pintupi-Luritja’ as distinct from other Western Desert varieties which are called ‘Luritja’.
There would have been large numbers of Luritja speakers at the Hermannsburg mission at different times. Aranda was the privileged language and the language of Bible translation at Hermannsburg, but Luritja would have been understood by some of the Hermannsburg population, as multilingualism is common in Central Australian indigenous societies. The Aranda evangelist Moses Tjalkabota spoke Luritja and was one of Carl Strehlow’s chief informants (J. Strehlow 2011: 1144). Strehlow recorded Luritja words in his linguistic and translation work and included 6400 words of Luritja in his wordlist (C. Strehlow 1909). He made some attempts at translating Bible verses into Luritja in his Aranda and Luritja Grammar, for example:

<table>
<thead>
<tr>
<th>Lakina</th>
<th>Altjirala</th>
<th>alarinjaka</th>
<th>kankitjita</th>
<th>era</th>
<th>lerrakua</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alatji</td>
<td>Tukuralu</td>
<td>mantanguraraku</td>
<td>bokularematu</td>
<td>paluru</td>
<td>katara</td>
</tr>
<tr>
<td>Like that</td>
<td>God-ERG</td>
<td>Earth-dweller-DAT</td>
<td>Like-HAB</td>
<td>3S</td>
<td>son</td>
</tr>
</tbody>
</table>

nintakuia ekurana nditjitalangu
kutungari palumbanu 3-
single POSS HAB-REL

“Like that God so loved the world that he gave his only Son” (John 3:16).
(C. Strehlow ca. 1910: 46).

The text is as close to a literal translation of the Aranda as the structure of the Luritja will allow.

---

37 The first Hermannsburg missionaries were aware of the Luritja language; Kempe (1891:1), for example, mentions it as another language of the region.
Illustration 1: Heinrich and Tjalkabota’s Hymnbook 1924 (Courtesy of the Lutheran Archives in Adelaide).

Oskar Liebler started translating some texts into the Luritja language (Latz 2104: 95) as he was managing the Hermannsburg Mission Station during Strehlow’s absence on sabbatical from 1910 to 1912. From the Luritja supplement of the Aranda hymnal (Heinrich and Tjalkabota 1924: 297) showing the use of the Luritja word Tjokur (Tjukurr) for ‘God’ in the First Article of the Apostle’s Creed.

The teacher H. A. Heinrich helped Moses and others to translate parts of Strehlow’s Aranda Service Book into Luritja (Latz 2014: 116). In the introduction, Loehe (page viii) says that “this edition, which carried a Supplement containing the Lutheran Catechism and ten hymns translated by Moses Tjalkabota and Mr. Heinrich into the Loritja language, comprised a total of 312 pages”. The last section of the hymnbook (Heinrich and Tjalkabota 1924, see Illustration 1) called Talua, ‘end’, or ‘Supplement’, but it was omitted in the 1964 Hymnbook revision. The translation of the entire New Testament into the Luritja language began in the 1960s with the arrival of Ken and Lesley Hansen. They were trained by the Summer Institute of Linguistics (SIL) in American structuralist and anthropological linguistics, whose studies were largely based on the experience of fieldworkers from the USA who worked in American Indian languages. Moreover linguistic relativity and new techniques of describing languages were introduced to Australia in the 1950s (Moore 2008: 285), and contemporary translation theory was taught by missionary linguists such as Nida (1969) and Beekman and Callow (1974). The Summer Institute of Linguistics translated according to the principles of idiomatic translation or dynamic equivalence. Like their predecessors, the Hansens sought to find key terms for the translation of the Bible. At the same time as the revised Aranda hymnbook was being published (Lyilhintjamia Pepa
Luther-arinya 1964) the Hansens were learning Luritja with the intention of translating the Bible into Luritja. Hansen (1983) identified contemporary idiomatic meaning-based approaches to translation with Martin Luther’s theory of translation, citing key passages from Luther, thus demonstrating the relevance of idiomatic Bible translation to Lutheranism.

Hansen did not follow the translation style of the 1924 hymnbook. Significantly, he did not attempt to create new key terms through the derivational processes of nominalisation and zero derivation. Rather, he used multi-word expressions for some terms. For example, ‘Pharisee’ was translated as *tjuwuku luwuku mikunytju*, “a lover of the Jew’s law” (Hansen 1983: 15). The Luritja translation of the New Testament and Old Testament stories were published, and this was the first time that they became available to Pintupi/Luritja speakers in their own language (Katutjalu Watjantja Yirrititjanu 1981; cf. Albrecht 2002: 158). The equivalent to the Aranda word *Altjira* was *Tjukurrpa* which Hansen attempted to use as the key term for God, but nearly a century after the establishment of the mission in Central Australia the Luritja people decided not to adopt *Tjukurrpa*. While the Luritja at Hermannsburg had adapted to the mission language and spoke Aranda, the Pintupi whom Hansen worked with lived further to the west and were less influenced by Aranda and the Lutheran mission (Hansen 1983: 21). Perhaps it was easier to consult Luritja speakers at the height of the era of the Self-Determination policy in the 1970s in which Aboriginal decision-making was encouraged and had moved to the foreground of government policy. At the same time mission policy had shifted to a tolerance of traditional Aboriginal religion which was seen as having a legitimate role in maintaining order in Aboriginal societies (Albrecht 2002: 74).

6.2 The wanderings of tjukurrpa

In some Aboriginal languages of Central Australia there is an important distinction between sacred and non-sacred texts. As Hansen (1983: 15) formulates it:

---

38 Introduced as a “non-Lutheran” in his article (Hansen 1983: 13), the editor of the Lutheran Theological Journal recognised that he was not a traditional Lutheran from South Australia. It is doubtful if any of the traditional South Australian Lutherans ever made this connection so strongly.

186
I was told by one of my Christian friends recently, “Katutja (‘God’) is not tjukurrpa (‘dreaming’), he is yilta (‘true/real’). He is before all the tjukurrpa’s ‘dreamings’.” If we had used Tjukurrpa for God, this important distinction of the Christian God would have been very hard to make. To illustrate the use of tjukurrpa and yilta, I will use the following example which was given to me on a couple of occasions. After a story has been told of some happening at a certain water place, the person has then said, “This story is yilta (‘true/real’), not tjukurrpa ‘dreamtime happening’.” Even though dreamtime myths are considered true to most Aborigines, they draw a distinction between historical happenings and dreamtime happenings.

Alyawarr speakers make a distinction between stories which are received by tradition altyerr ilem, ‘to tell altyerr’, and those which happen in historical time and which have been witnessed by the storyteller. In Luritja there are separate notions of real and fictive, yurti and Tjukurrpa respectively (Myers 2002: 33). We can see that the differences are often expressed as a distinction between ‘historical happenings’ and mythical ‘dreamtime happenings’. Those happenings which are identified as ‘the Dreaming ones’ are usually associated with particular named places and explicitly owned by individuals or groups (Green 2014: 44).

Although early twentieth-century translations into Luritja closely followed the Aranda translations of the hymnbooks and catechism, the above-mentioned distinction seems to be the reason why Tjukurrpa was not adopted as a term for God. Instead, two Luritja words were used, katutja, “one who pertains above” (Hansen 1983: 15) and mama, “father” (Hansen and Hansen 1992: 53). The rejection of Tjukurrpa for ‘God’ appears to have occurred because of Aboriginal concerns that there was a mixing of traditions, and that traditional culture and Christianity should be kept separate. The Luritja who were involved with the translation were those who spoke Luritja as a first language and had less exposure to Aranda and to the missionary language which was developing at Hermannsburg. Government policies of Self-Determination led to the relocation of the Luritja people and their residence in small ‘outstations’ rather than government settlements. Therefore, the Western Luritja and Pintupi were less influenced by the mission

---

39 As to the variation of Tjukurr and Tjukurrpa, “pa is a special syllable that is added to the words to prevent them ending in a consonant” (Eckert and Hudson 2010: 16).
culture and more concerned about keeping traditional religion and Christianity in separate domains. There were many other Western Desert groups such as Pitjantjatjara and Ngaanyatjarra which did not adopt Tjukurr as the term for ‘God’.

In other areas however, Altjira was adopted because the hymnbooks were translated word-for-word into their languages, and Altjira was also present in their languages and therefore easy to incorporate into the translation.

Then again, Altjira-related words have diverged along different paths because for Alyawarr and many Eastern Arrernte speakers Altyerr (Altjira) retains its traditional meaning. In addition, Anmatyerr, Western Arrarnta and some Alyawarr speakers use Altjira for ‘God’. Some translations have used Altjira/Tjukurr for other biblical terms; and Jukurr, a cognate term in Warlpiri has been used to translate timelessness (Swartz 1985: 417), as with logos or ‘Word’ in John’s Gospel. It appears that Tjukurrpa translates a kind of text such as a discourse or catechism. In the recent Pitjantjatjara hymnal, produced by the Lutheran Finke River Mission (2010: iv), Tjukurp40 has been used to translate Godaku Tjukurpa the ‘Word of God’. Another section of the hymnbook is Luther’s Catechism Lutherku Tjukurpa. Where Western Arrarnta has used yia marra, ‘good story’, for the Gospel, the Pitjantjatjara uses tjukurpa palya, ‘good story’.

In Western Desert languages Tjukurrpa appears to have a wider variety of senses including ‘Dreaming, Law’ and ‘story’, extending across mundane and secular domains in the Pitjantjatjara Dictionary (Goddard 1992: 155). It is used to mean ‘government script’ which may concern topics such as housing and health. The terms which have been employed are not equivalent, even between language groups which are affiliated with the Lutheran church. There was syntactic and semantic dissonance, which meant that the word was not readily understood with new associations, even among Aranda speakers.

7 Conclusion

On the two hundredth anniversary of the Bible Society in Australia, in 2017 (Mattingley and Sherman eds. 2017), Lutheran translators and local Churches have carried out a disproportionate amount of Bible translation compared with other missions, completing the

40 Standard Pitjantjatjara spelling for what is spelled ‘Tjukurrpa’ in other Western Desert languages.
first two translations of the New Testament into Aboriginal languages in 1897 (Dieri) and 1919 (Aranda). The Church took a century to move from its base at Hermannsburg, from Arrarnta, to the languages of the outlying regions. Completed Pintupi-Luritja translations of the New Testament and selections from the Old Testament only appeared after 1977, the centenary of the arrival of Hermannsburg missionaries at the mission. The use of *(Altjira)* was a bold move and involved semantic and syntactic change so that the word had meanings which it did not have in Aboriginal tradition. The languages of Central Australia which adopted *(Altjira)* as ‘God’ in Church contexts were those which were adjacent to the Western Arrarnta region, culturally and linguistically similar to the Western Arrarnta, influenced by the Lutheran mission and receptive to its influence. However, others who were close and socially interrelated with the Aranda, such as the Luritja, did not adopt their equivalent term *(Tjukurrpa)* as ‘God’. Of all Central Australian translations, the Eastern Arrernte translation has moved furthest from the Western Arrarnta. The recently completed Eastern Arrernte Bible (Wycliffe Bible Translators Australia 2017) uses *(Ingkarte)* for ‘God’ and *(angkentye)*, ‘language’, for ‘logos’ in John’s Gospel. This lack of equivalence is due not only to variation in the semantics in words of different languages, but also to underlying language ideologies, mission histories and identification of the speakers – all aspects which await further study.

With a view towards the twentieth century, the increasing autonomy of Aboriginal people is reflected in their gaining voting rights (1967) and land rights (1970s), and in the establishment of Aboriginal community-controlled councils. At the same time the expansion of the Mission and the establishment of Aboriginal Churches meant that Aboriginal people have become more actively engaged in Christian religious activities, becoming pastors and having gained a voice in decision-making, which has also led to greater Aboriginal involvement in the translation process.
**Glossary of linguistic abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>Accusative Case</td>
</tr>
<tr>
<td>CONT</td>
<td>Continuous Aspect</td>
</tr>
<tr>
<td>DAT</td>
<td>Dative Case</td>
</tr>
<tr>
<td>EMPH</td>
<td>Emphasis</td>
</tr>
<tr>
<td>ERG</td>
<td>Marks the Agent of a transitive clause</td>
</tr>
<tr>
<td>HAB</td>
<td>Past Habitual</td>
</tr>
<tr>
<td>LOC</td>
<td>Locative marker on nouns.</td>
</tr>
<tr>
<td>THEN</td>
<td>Temporal succession, then it happens.. Simple past</td>
</tr>
<tr>
<td>PAST</td>
<td>Tense</td>
</tr>
<tr>
<td>PL</td>
<td>Plural</td>
</tr>
<tr>
<td>POSS</td>
<td>Possessive Case</td>
</tr>
<tr>
<td>PRES</td>
<td>Present tense</td>
</tr>
<tr>
<td>REL</td>
<td>Relative tense</td>
</tr>
<tr>
<td>S 3S</td>
<td>Singular pronoun Third person singular pronoun: he, she, it</td>
</tr>
</tbody>
</table>

**References**

Albrecht, Paul G. E. 1997 The New Western Arrarnta Bible. Dedication speech.  
(accessed 04.02.2019).  


Austin-Broos, Diane 2003 The Meaning of Pepe: God's Law and the Western Arrernte.  
2010 Translating Christianity: Some Keywords, Events and Sites in Western Arrernte conversion. *The Australian Journal of Anthropology* 21/1: 14–32.


Loehe, Max 1988 Preface to First Edition [1965]. In: Lyilhintjamia Pepa Luther-arinya,

Luther, Martin 2012 Der kleine Katechismus [1529]. Hannover: Lutherisches Verlagshaus.


Map of Language Areas in Central Australia 2018 Adapted from a map by the Institute of Aboriginal Development Press, Alice Springs <www.iad.edu.au> (accessed 27.06.2018).

Mattingley, Christobel, and Louise Sherman (eds.) 2017 Our Mob, God’s Story. Aboriginal and Torres Strait Islander Artists Share Their Faith. Sydney: Bible Society of Australia.


Moore, David 2015 The Reformation, Lutheran tradition and missionary linguistics. 


Oberscheidt, H. 1991 Western Arramta Analytical Dictionary. [Typescript.] Alice
Springs: Finke River Mission.


Roennfeldt, David, with Members of the Communities of Ntaria, Ipolera, Gilbert Springs, Kulpitarra, Undarana, Red Sand Hill, Old Station and Other Outstations 2006 Western Arrarnta Picture Dictionary. Alice Springs: IAD Press.


Williams, Raymond 1985 Keywords: A Vocabulary of Culture and Society. Oxford: Oxford University Press.


The Author

Altjira, Dream and God

Introduction: Following the Track of Dreaming

This paper follows a well-worn track about a controversial word: Altjira. I write with an interest in lexicography, in writing entries and definitions for bilingual dictionaries. It is necessary to deal with entries which have multiple senses and to arrive at accurate definitions. This paper is about meaning and how we translate words, how we represent, in English, those more complex terms which don’t have an equivalent in English, particularly the terms for feelings, cognition, religion, philosophy and law. Two divergent paths have been taken and it is through ‘Altjira’ that we can examine the disparate objectives and methods of missionaries and anthropologists.

The chief protagonists in the dispute over the meaning of Altjira were Carl Strehlow, Baldwin Spencer and Francis Gillen. Carl F.T. Strehlow (1871–1922) was a German Lutheran missionary, linguist and ethnographer who worked with Central Australian Aboriginal people from 1892, initially at Bethesda Mission at Lake Killalpannina in northern South Australia. In 1894 he moved to Hermannsburg in the Northern Territory, remaining there until 1922. Francis Gillen (1855–1912) studied Aboriginal societies in his role as stationmaster at Alice Springs. Walter Baldwin Spencer (1860–1929) was an English biologist and anthropologist. Although anthropology was at that time an emerging discipline with few professional practitioners, I refer to Spencer and Gillen as ‘anthropologists’ throughout this chapter.

Strehlow and Spencer represented opposed knowledge systems, those of the human sciences and the natural sciences. Strehlow (1910: 83) asserted that Spencer and Gillen failed to engage in the Aranda language of their informants and spoke to them in Pidgin English. Spencer (1927: 596) would assert that Strehlow failed to observe
ceremonies and was thus unaware of the religious life of the Aranda. Strehlow’s untimely
death in 1922 and the publication of his ethnographic work, *Die Aranda* (1907–1920), in
German without an English translation meant that he was largely unknown in the English
speaking world. By contrast, the work of the anthropologists, Spencer and Gillen (1899;
1904) became well-known and, as Urry (1993: 44–5) says, ‘the information on
Aborigines was to play a critical role not only in Frazer’s later writing, but also in the
works of Durkheim and Freud’. In Australia, ‘Alcheringa’ became known in Australian
English as ‘Dreamtime’, although Ramson (2002: 120) claims that ‘it was a long time
before it became common coin’.

I will refer to Strehlow’s wordlist (1909) and Spencer’s and Gillen’s *The Arunta*
(1927) as being their final contributions to the understanding of ‘Altjira’. I claim that
Dreamtime and Dreaming are mistranslations, products of English monolingualism and
the key terms of nineteenth century anthropology. Further, the spread of the terms has had
negative consequences for perceptions of Aboriginal societies by Australians. Kenny
(2008) is concerned to show Strehlow’s humanistic background through ‘German
philology, the German Romantic movement, Humboldtian cosmography, history and
comparative geography’. Wolfe (1997) and J. Strehlow (2011) have traced the translation
of ‘Altjira’ as ‘Dream-times’ (Gillen 1896) and its later appropriation by speakers of
Australian English as ‘Dreaming’. Although others have made similar arguments about
the meaning of ‘Altjira’, for example the linguist TGH Strehlow (1960: 20), I am
interested in the question: ‘What did language learning contribute to the missionaries’
understanding of Altjira and how do terms develop in contact languages?’ I am taking the
perspective of linguistics, translation theory and the ethnography of communication to
show the complexity of the translation task and to argue that without linguistic and
translation training, anthropologists were liable to overestimate their ability to understand
what Aranda informants were saying.

Throughout this paper I use the Hermannsburg Mission spelling of ‘Altjira’ and other Aranda (current spellings are Arrarnta and Arrernte) words, except where they are used in the quotations of other authors, for example, Spencer, who adopted the spelling ‘Alchera’.

**Translating Religious Terms**

Those who work as interpreters and translators know that many words can have a single word translation. An example is a word such as ‘tree’. Translators criticise the ‘conduit metaphor’ of ‘direct translation’: the idea that a word in one language can be directly translated into a word of another language with a literal 1:1 equivalence (Laster and Taylor 1994). Some words don’t have a straightforward translation and words cannot be substituted without paraphrase or explanation. Even between the familiar European languages, Cassin et al. (2014) record terms which are regarded as untranslatable, including Latin ‘res’, German ‘Heimat’ (see also Applegate 1990), French ‘entrepreneur’ and Russian ‘pravda’.

Often there are no equivalent terms because languages and cultures are incommensurable in some ways. Their key terms reflect their different ways of viewing the world. Incommensurable concepts are particularly common in the field of religion. Religious loanwords resist easy translation and often are best left untranslated. Think of the difficulty of translating Sanskrit ‘yoga’ or Classical Greek ‘logos’ (Silva 1994: 26) into English. Gipper (1986: 121) claims that for ‘logos’, ‘every Greek dictionary offers a wide spectrum of expressions that can stand for logos, but which nevertheless do not exhaust the concept. It is important to remember that intellect and reason, reasoning power and reflection at least, but speech, word and discourse (in other words language) as
well are contained in the word *logos*. TGH Strehlow (1967) listed 39 English words which can be used to translate ‘*logos*’ including ‘speech, reason, discourse, report, instruction, teaching, proclamation, declaration, subject, matter, thing, reason, motive, financial account, event, appearance, accusation, treatise and settlement’. Through their extensive studies in the Classical languages, the missionaries were aware of strategies of translating ‘*logos*’ and other key terms.

There are many terms which may be regarded as untranslatable between European languages which have shared histories and influences from the Classical languages, Greek and Latin, and to a lesser extent, from Hebrew and Arabic. How much more difficult must it be to translate Aranda terms into English, given the lack of a shared history and the high degree of incommensurability between the languages?

English has borrowed around eight terms from Aranda and the most important of these are in the field of religion (Dixon et al. 2006: 58), including ‘*alchera*’ (*altjira*), ‘*churinga*’ [sacred object] and ‘*kurdaitcha*’ [malignant spirit]. There is no single English word that can be used to translate ‘Altjira’. Stanner (1979: 24) viewed the Dreaming as a kind of logos or principle of order, transcending everything significant for Aboriginal man, and for him it could only be understood as ‘a complex of meanings’ (Stanner 1979: 23).

**A Glaring Example**

Wolfe (1997: 82) shows that the spread of Dreaming resulted from the anthropological work of Spencer and Gillen. For the purpose of illustrating the meaning of ‘*alchera*’, Spencer and Gillen (1927: 306) compiled 19 English sentences which they had Aranda speakers translate into their own language. TGH Strehlow (1947: 170) described the 19 sentences as ‘a glaring example’ of the kinds of mistakes which monolingual fieldworkers
can make. Their mistakes were elementary and were not made by the missionaries, whose training in translation enabled them to translate accurately. The tenses on the verbs in sentences 16–19 are translated incorrectly, using the present tense ‘ungwendama’ [sleeping] instead of the past tense. Spencer’s English source language sentences say nothing about ‘sleeping’, but this appears in the Aranda translation. In every example containing ‘dreamt’, the translation has ‘sleep last night’, which is not a faithful rendering of the English original.

There is limited syntax to the sentences, rather, just a telegraphic stringing together of words, designed to prove the meaning of ‘Altjira’ as ‘dream’ by providing context for the word. However, the contexts have been invented, as in sentence number 15:

\[ \text{Yinga (or ta) Alchera nukula.} \]

‘I lived in the Alchera.’

Plainly, this sentence would be a logical impossibility and would not be spoken by speakers! Spencer also failed to realise that only the intransitive first person pronoun (‘yinga’ and not ‘ta’) can be used with an intransitive verb.

**Word Categories**

The verbs in sentences 16–19 are translated as ‘dream (noun)’. These are not complete sentences, missing, for example, the personal pronoun ‘atha’ [I] in sentence 16. Yet in all cases, the verb ‘rama’ occurs. That doesn’t show that ‘altjira’ means ‘dream (noun)’ but that ‘altjira rama’ means ‘dream (verb)’. ‘Altjira’ is not ‘a dream (noun)’ because it doesn’t occur without the verb ‘rama’ when it is being used to mean ‘having a dream’. Simply, ‘altjira rama’ codes a process rather than a thing. The minimal semantic constituent (Cruse 1986: 36) from which the translation is derived is ‘altjira rama’, not
‘altjira’. ‘Altjira’ and ‘altjira rama’ must be entered as separate entries in bilingual dictionaries. The lexeme ‘altjira rama’ is a minimal semantic constituent because it is incapable of further subdivision (Cruse 1986: 25). The verb ‘rama cannot be deleted from ‘altjira rama’ without producing a change of meaning or, more probably, a complete loss of meaning.

The sense ‘dream’ assigned to ‘Altjira’ was actually ‘altjira rama’, ‘to dream’ (verb), a compound or construction from a different word class. The identical form of the noun and the verb ‘dream’ in English may have been the source of the confusion, which began with Gillen’s assumption that ‘dream’, translated as ‘altjira rama’, could also be used to translate ‘Altjira’. In addition, the first three of the sentences involve a grammatical Subject seeing a grammatical Object, so that ‘eruka’ [saw] in Spencer’s spelling should be the verb ‘altjira raka’ [dreamed] rather than the simple verb ‘raka’ [saw]. This proves Strehlow’s point that ‘dream’ (verb) is ‘altjira rama’. Spencer’s failure to understand grammar plainly affected his understanding of ‘Altjira’.

Carl Strehlow (1907: 3) realised that ‘Altjira’ and ‘altjira rama’ are members of different word classes. He understood which words Aranda speakers used, the frequency of their use and their significance in the linguistic system and worldview of the speakers. Dreamtime was an invention of the anthropologists (Wolfe 1991: 199), which, as Strehlow realised, was not a functional equivalent of Altjira.

**Compounding**

There is no reason to think that ‘altjira’ must be translated as ‘dream (noun)’ in compounds. Spencer and Gillen (1927) failed to understand compounding in their translation of the 19 sentences. The claim that ‘Altjira’ means ‘a dream’ works on the assumption that ‘altjira rama’ means ‘see a dream’ and is an atomistic analysis for which
each word is assigned a single word gloss. ‘Altjira rama’ is therefore better described as a compound (Green 2012: 162). An alternative analysis is that ‘altjira’ is an adverb which is modifying the verb ‘rama’.

In related languages, such as Alyawarr (Moore 2012), there are a number of compounds involving ‘ar-’ [see], for which the first element is unanalyseable. The compounds are not semantically compositional, which is to say that they don’t follow the principle of compositionality: that ‘the meaning of a composite expression is a function of the meanings of its component expressions’ (Lyons 1981: 144). With ‘iterl-ar’ [know], the second verb is not translated as ‘see’. Another example is Alyawarr ‘amek ar-’ which has really nothing to do with sight but means ‘to avoid’.

As Green (2012) has said, there are other collocations based upon ‘Altjira’ but these indicate further complexity and do not support the simple substitution of ‘a dream’ for ‘Altjira’. To ‘altjira ilama’ is to tell a traditional story, not to ‘tell a dream’. ‘Altjira ilkuma’ is not to ‘eat altjira’, which is what we would expect if a literal translation were possible and ‘altjira’ had an invariant meaning of ‘a dream’. Rather it is something like ‘have breakfast’ (Green 2012: 168). In addition, ‘altjira ilkuma’ is not recorded in Alyawarr, Western Arrarnta or Eastern Arrernte. New usages, such as ‘television’, are instances of ‘altjira rama’, not of ‘Altjira’.

Writing Aranda

There is a marked contrast between the Mission Orthography, that is, the writing system used by the Hermannsburg missionaries, and the writing of Aranda words by the anthropologists. Spencer and Gillen (1927: 592) deleted syllables, which can have serious consequences for understanding the meaning of words. A syllable was deleted from ‘alcherama’ [to dream], and ‘rama’ [see] has not been recognised as a part of the
compound. ‘Alcheringa’ was analysed as ‘alchera’ [a dream] and ‘ringa’ as a suffix meaning ‘of’. Spencer (1927: 594) confused ‘anga’, the ablative marker, with ‘ringa’ which should represent a distinct suffix with a distinct meaning of ‘from, source’. This is taken from Kempe (1891) and is clearly the same component as ‘-arinnga’ [denizen of, belonging to, of] in the current Western Arrarnta orthography. Spencer was unable to pronounce this suffix accurately, substituting ‘ngk’ for ‘ng’ (Green 2012: 163) and thus replicating an inconsistency in the phonetic key to his orthography. This was based on the English spelling convention that the digraph ‘ng’ may represent a single consonant phoneme, the velar nasal [ŋ] or a consonant cluster [ŋk]. He was apparently unaware that ‘ringa’, ‘rinja’ and ‘rinia’ represented the same suffix and that the variation in form was merely a matter of transcription.

This is an example of how the meaning is often not recoverable from Spencer’s work because of his lack of graphophonic awareness. He was unaware of the limitations of his method of transcription. Although ‘anga’ (+nge in the current Eastern Arrernte orthography) is used as the ablative marker in the Eastern Arrernte language (Henderson and Dobson 1994), the marker is not used in Western Arrarnta and wasn’t recorded or analysed by the Hermannsburg missionaries. While Spencer (1927: 589) admitted that he made use of the linguistic analyses of the missionaries, that was not possible in this case. Spencer’s confusion about the spelling of ‘Altjiranga’ and the unfamiliarity of the missionaries with the dialectal form, led Strehlow to speculate that Spencer had meant ‘altjira rintja’ [a dream], a noun of the kind derived from verbs in Aranda. TGH Strehlow (1944: 62) reported that abstract nouns were derived from verbs by means of the nominalising suffix ‘in(t)ja’ or ‘un(t)ja’. Nominalisation was ‘a great boon to missionaries translating the New Testament into the native language’ (ibid.) by closing lexical gaps and creating key terms for the translation of the Bible. The verb ‘altjira
rama’ [to dream] can be nominalised to ‘altjira rintja’ [a dream] as a deverbalised nominal or ‘action nominal’ (Nordlinger 2002). Action nominals lack the full range of properties of nouns, such as the ability to take case-marking and other suffixes and modifiers. They retain verb-like properties. Even as an action nominal, the word expresses a process that is happening: in this case, someone is having a dream. Speakers rarely use these nominals in conversation and we therefore have few examples of dream (noun).

How do we know that ‘altjira rinja’ was what would later be written as ‘altjira rintja’ and not ‘altjira-arinya’? For ‘nj’ may represent more than one consonant or consonant cluster in the earlier documents. Strehlow said as much in his response to Planert (Strehlow 1908): ‘Nj in the introduced script can also indicate ntš, ndž as well as ny.’ When phonemic segments were under-specified, this doesn’t mean that they were incapable of being read correctly, because words were spelled consistently and easily recognisable (Moore 2013).

In his wordlist (Strehlow 1909), Strehlow clearly defines the word ‘altjirerinja’. The ambiguity between ‘dream’ as a noun and ‘dream’ as a verb is removed by looking at the original German: altjirerinja is translated as ‘Traum’ [dream (noun)] in Strehlow’s wordlist. The Loritja equivalent is tukurbmanañi. English uses ‘dream’ for both the noun and the verb but nouns are capitalised in German:

\g (Gott sehen) traeumen
\e (see God) dreaming
\l tukura nangañi
\a altjirerama
The digraph <nj> is not ambiguous in his wordlist entry, clearly representing the consonant cluster which was later written as <ntj>. Altjirerinja in the Mission Orthography, then, can only be altjira rintja – the nominalised form of altjira rama – and not -arenye as Green (2012: 163, footnote 10) has claimed. Carl’s spelling of altjirerinja was according to the established conventions of the Mission Orthography and was not a careless mistake. Even infrequently used words such as altjirerinja are able to be interpreted accurately because they were written in the wordlists, grammars, journal articles and other literature in which the missionaries systematically described the Aranda language. There is a further example of altjira rintja in the Heinrich letters (Heinrich 2002: 30).

Carl Strehlow used the Mission Orthography as a conventional writing system which he had inherited from the previous Hermannsburg missionaries and was well aware of its limitations. In contrast with the Mission Orthography and other uniform orthographies, which were used by contemporary linguistic researchers and available to fieldworkers in Australia since at least the 1830s (Moore 2013), Spencer’s spelling was inconsistent in two directions: a single letter or letter combination represents more than one sound and individual sounds are represented by more than one letter or letter combination. Spencer relied upon his knowledge of his own language, representing Aranda sounds with English sound values. The mistakes have been made in the phonetic key of his final work (1927) in which Aranda sounds are compared only with English
sounds. For example, in Spencer’s key, ‘a in an’ and ‘e in red’ used in his spelling (for example, of ‘Alchera’) reflect English sound values, rather than those of Aranda. As a non-speaker, Spencer would have relied more heavily upon his written recording of Aranda, but it is his written work which is deficient. It is clear that Spencer and Gillen didn’t accurately record how Aranda people actually spoke.

The Mission Orthography was used for a century as a functional means of written communication by both Indigenous and non-Indigenous people. They wrote letters to each other in Western Aranda and they could easily read what was written. The Hermannsburg missionary, the Reverend H. Kempe (1891), used 15 segments, including 13 letters and 2 digraphs, to represent around double that number of consonants in the language and thus the consonant phonemes of Aranda were under-differentiated. The missionaries refined the Mission Orthography over time as they heard and recorded new and hitherto unrecorded sounds (see, for example, Strehlow1908). Despite its limitations, the Mission Orthography continued to be used for correspondence, even after the identification of more Aranda consonant sounds by TGH Strehlow (1944) and the representation of all the consonants, by the 1950s, using an orthography which was based upon the International Phonetic Alphabet. The letters form a rich collection of literature from the Hermannsburg Mission – for example, the Heinrich correspondence (Heinrich 2002). The words that the missionaries wrote so consistently were recorded in the largest Aboriginal language wordlist that has ever been compiled. The original document contains over 15,000 words of Aranda, Loritja and Dieri.

Strehlow’s representation of sounds is not problematic if we read words rather than segments. For example <r> in his initial representation of erama [become] (Green 2012: 162) is not a problem for his understanding of the semantics of altjira rama. Although it would appear as though he had identified rama [see] with the intransitive
verbaliser erama in a letter to Moritz von Leonhardi, dated 20 December 1901 (J. Strehlow 2011: 772), this identification does not appear in his later work. Most importantly, it doesn’t affect his recording and understanding of the meaning of altjira rama, which has a distinctive spelling, whether or not the sounds now written <r> and <rr> were distinguished.

A pre-phonemic orthography doesn’t necessarily cause problems for reading comprehension because phonemically under-differentiated words can be understood, provided that they are spelled consistently and there is a reasonable approximation between the graphic segments and the phonemes (sounds which are significant for distinguishing the meanings of words) of the language. It can’t be argued that the missionaries misunderstood words by using a deficient orthography for transcribing Aboriginal languages or that their representations are semantically opaque. Their orthography is readable, their lexicographic work was sound and their translations are reliable enough for us to understand what they wrote over a century ago.

**Lurking Consistency**

Spencer (1927: 304) dealt with the complexity of ‘Altjira’ by claiming that the term is imprecise and unknowable: ‘The term Alchera is one of somewhat vague and wide import which it is difficult to define with anything like absolute precision.’ His opinion is at variance with his other claim that the word had two definite meanings and that its fundamental meaning was ‘dream’. ‘Alcheringa’ (Altjiranga) was analysed as ‘alchera’ ‘a dream’ and ‘ringa’ ‘a suffix meaning ‘of’ and the word was translated as ‘from a dream’. Spencer’s reductionist method was to use one sense, ‘dream’, to translate ‘Altjira’ as though it had a ‘basic’ or ‘core’ meaning. Words were loaded with special meanings. ‘Altjira’ would always be translated as ‘dream’ because that was the core
meaning of the word. Spencer (1927: 595) was ‘perplexed’ when he found that there a further sense of ‘altjira’ as ‘mother’s totem’. When the word wasn’t being vague and indeterminate, it had a definite and fixed ‘core’ meaning.

Polysemy, the multiple senses of a word, was seen as inconsistency. Spencer appears to have regarded ‘Alchera’ as a single lexeme with a straightforward relationship between ‘Alchera’, ‘Alcheringa’ and ‘alchera eruma’. However, for Carl Strehlow, ‘Altjira’ and ‘altjira rama’ were separate lexemes and separate entries in the wordlist.

Neither man, though for different reasons, was claiming that Altjira was polysemous. This analysis calls into question the application of the ‘dream/Dreaming polysemy’ (Green 2012: 166), as though Altjira is a single polysemous lexeme. The so-called polysemy of pre-contact is, rather, a case of untranslatability and the need to use a number of English words to translate ‘Altjira’. After the involvement of missionaries and anthropologists, the word appears to have taken on the radically disparate and polysemous senses of ‘God’ and ‘Dreaming’.

Joseph Grimes (1963), reviewing Barr’s *Semantics of Biblical Language* (1961), wrote of the danger of a ‘lurking consistency’, when every occurrence of a word must involve an invariant component of ‘meaning’. The result, according to Grimes (1963:1189), is to neglect polysemy and the influence of context, for the analyst ‘may focus on some area of meaning that fits his current hypothesis about values, and extrapolate from that to all uses’. Spencer’s method was the reverse of that of lexicographer. He started with a concept and then sought a key term to translate the concept. It is easy to agree with John Strehlow (2011: 838) that ‘Dreamtime’ is a false etymology.

**Little Children Aren’t Sacred**

According to TGH Strehlow (1947: 174), ‘we must guard against a mechanical
translation for words such as Altjira’. Linguistic analysis is about the frequency of a
term’s use and what the term combines with (collocation) and whether people use the
term at all. A naïve view of translation can be seen in the title of the report Ampe
Akelyerneman Meke-mekarle, Little Children are Sacred (Wild and Anderson 2007). The
word ‘sacred’ was used as though it could be translated literally from English. The
translator imagined that it is possible to calque the semantics of the source language and
have a meaningful translation. The Alyawarr word ‘amek-amek’ doesn’t collocate with
‘ampe akely-rnemane’ [children]. The dictionary entry ‘amek-amek’ requires more than a
single word English translation and should not be translated as ‘sacred’. It usually refers
to a location, a ‘sacred site’. English ‘sacred’ has seven senses, according to the
Macquarie Dictionary. Which sense of sacred would it be? It was supposed to be ‘secured
against violation or infringement’ but it was actually another sense, meaning something
more like ‘relating to or connected with religion’. ‘Little Children are Sacred’ is what is
known as a ‘collocational clash’ (Beekman and Callow 1974), which occurs in highly
literal translations – a combination of words that doesn’t occur in real conversations and
is not understood by speakers because it results in wrong sense or nonsense. Adequate
translation requires an understanding of how words are used by speakers in real
conversations, involving years of observation and language acquisition.

The Perils of Monolingual Fieldwork

What happens when someone goes to the field without awareness of languages and talks
to informants with whom they don’t share a common language? Schneider (2011)
highlights the need for linguistic fieldworkers to learn the languages which they are
studying. Fieldworkers are not immune from the problem of obtaining the wrong results
and eliciting false data. Neither Gillen nor Spencer spoke Aranda fluently, and Aranda is
a language that takes many years to learn. Carl Strehlow acted as interpreter for Gillen. Strehlow said of Gillen’s attempts to communicate: ‘Pidgin English mixed with individual words of Aranda when speaking to the natives’ (C. Strehlow 1910: 83).

Green (2012: 162) understates the case in asserting that ‘neither Spencer nor Gillen claimed Arrernte fluency’. But there is no evidence that either had seriously attempted to learn a second language, let alone attained fluency in any language other than English. As a consequence they lacked the linguistic awareness which is found in those who spend time acquiring other languages. We can assume that the English of their informants was poor and therefore susceptible to the intercultural communication problems which I will mention later. Carl Strehlow’s colleague, missionary Otto Siebert (Nobbs 2005: 32), criticised Spencer’s and Gillen’s work for being based upon English. Lacking linguistic awareness, they were dependent upon the grammatical and lexicographic research of the missionaries.

Spencer and Gillen didn’t seriously concern themselves with language learning and remained unenlightened about what is involved in second language acquisition. As monolinguals, they were linguistically disadvantaged. Language was a foreign country that neither had explored and they had little idea about what to take with them on the journey. For Spencer and Gillen, language acquisition was an afterthought. They stood in a long tradition of British anthropologists who ignored the need to learn foreign languages (Crick 1976; Henson 1974; Urry 1993). Elicitation was useful for compiling a brief glossary of Aranda key terms but their research didn’t extend to the more complex aspects of Aranda. As TGH Strehlow (1947: 169) noted, Spencer and Gillen failed to understand the song lines. By contrast, for the Hermannsburg missionaries, language learning was the first base in the exploration of other worlds, in this case the world of the Aranda. The Hermannsburg missionaries acquired ancient languages such as Greek and
Latin and were therefore grounded in a tradition of language comparison which enabled them to think beyond the structures of their first language. They had encountered languages with unfamiliar scripts, such as Greek and Hebrew which require a segmental and graphophonic approach to sound analysis. They were able to devise uniform orthographies. They came to an understanding of a society through an understanding of its language, equipped with linguistic insights from the emerging discipline of philology. Germany in the nineteenth century had experienced significant research in the fields of phonetics, grammar and lexicography (Moore 2014b). The missionaries had encountered unfamiliar grammatical categories such as dual number, the optative mood and middle voice of Classical Greek and used this understanding to describe analogous structures in Aboriginal languages.

Researchers who learned foreign languages, for example Hocart (1933), recognised the advantage that the missionaries had over the anthropologists in understanding other cultures. But the most critical field in which Gillen and Spencer had no training or experience was translation theory. The missionaries were trained in the key fields of exegesis, in textual criticism, interpretation and linguistic analysis of texts such as those of the ancient Greek and Latin authors. It is in the process of learning another language and attempting to translate from one language to another that we become aware of the importance of differences between languages. We are able to discern what it is possible to say in the second language and, probably even more importantly, what it is not possible to say in that language. Gipper (1986:124) relates that ‘the sensible world is conceptualised in a specific manner in each language, which contains a specific internal organization of the vocabulary and specific syntactic structures’. Speakers are unaware of these aspects of their language until they learn another language which doesn’t share the characteristics of their mother tongue. In Gipper’s (1986:125) view, ‘the world-view
character of language can only be made explicit by means of linguistic analyses’.

It is evident from his wordlist that Carl Strehlow had learned three Aboriginal languages, Dieri, Aranda and Loritja, over a 30 year period and had extensive training in language comparison, which enabled him to make realistic and accurate analyses of Aboriginal languages, using the tools that were available to him at that time. Strehlow had also translated the New Testament into Dieri (1897) and was working on an Aranda translation. In the words of Siebert (Nobbs 2005: 37): ‘I have no choice but to study the people and to thoroughly research its legends and myths, its manners and customs, its going and coming. I must as it were abandon my European perceptions and enter into the manner of perception of my Australians, in order to think and act in a way which corresponds with their sphere of thought.’

**Linguistic Dissonances**

I want to discuss now linguistic dissonances, those problems in communication that we have in translating between languages and especially between Standard English and Local Englishes of Central Australia. Liberman (1985) notes that individuals in Central Australian Aboriginal societies do not readily assert themselves or express dissent. Eades (2013: 114) explains the phenomenon of ‘gratuitous concurrence’ as ‘the very common Aboriginal conversational pattern of freely agreeing to propositions put to them in Yes-No questions regardless of their actual agreement, or even their understanding of, the question’. This was a problem for Spencer and Gillen, who attempted to understand the meaning of ‘Altjira’ by asking leading questions. TGH Strehlow (1947: 170) claimed of Spencer and Gillen’s fieldwork that ‘frequently their ignorance of the language forced them to use leading questions when seeking their information and the natives desire to please their questioners – a desire that vitiates such evidence when given in a court of law
renders suspect some of the information gained in this way’. Different interactional styles have important implications for fieldwork and for the accuracy and authenticity of the data which is gathered.

The Development of an Interlanguage

Spencer (1927: 306) claimed that Aboriginal language speakers were using the word ‘dreaming’: ‘It is also very significant to find that natives who can speak English, as many of them can do now with varying degrees of proficiency, when referring to a man’s Alchera and everything associated with it in the far past mythic times, always call it ‘his dreaming’.

Wolfe (1997: 82) shows that the spread of ‘Dreaming’ resulted from the anthropological work of Spencer and Gillen (1927: 595). They appear to have assumed that a word can take on a meaning only if it is taught explicitly, as when the Hermannsburg missionaries used ‘Altjira’ for ‘God’. But the spread of terms is often unintentional. I suggest that ‘Dreaming’ established itself by way of an interlanguage of the kind that Cooke (1998) has identified. In Australia, an interlanguage develops when speakers of an Aboriginal language learn English partially, and words with different meanings emerge in Standard English and local Aboriginal Englishes. The word ‘law’, for example, is used in Aboriginal Englishes and Standard Australian English to mean two different kinds of law: the traditional Aboriginal law and the Australian common law. Lechleitner (2013: 7) refers to the former as the ‘Altjira law’, recognising that ‘law’ is another possible translation for ‘Altjira’.

Some words have different meanings in different languages and dialects and these we call false friends. There are many false friends between Standard English and Aboriginal Englishes (Moore 2014a) in Central Australian interlanguage. The word
‘cheeky’, for example, often means ‘dangerous, violent, poisonous or venomous’ in Aboriginal Englishes and is very different from its Standard Australian English meaning, which is closer to ‘insolent’. The word ‘kill’ in Aboriginal Englishes can mean ‘strike’ or ‘hit’.

Morphy (1996: 178) is confused in his assertion that ‘Dreaming’ ‘occupied a lexical gap in Aboriginal languages’. Morphy’s argument is that there is a resonance between ‘Altjira’ and the English ‘to dream’. ‘Dreaming’ may then have become an expression which has different meanings for people who speak different dialects of English and not the same meaning as Morphy assumes. The word developed as a term for an incommensurable referent, for which any single word or phrase from English would be inadequate. Gillen’s informants would have thought that he was using Standard English and that his literal translation was the way that English was used. How could they have known otherwise? They would have adopted ‘Dreamtime’ and the word caught on, not because there was some semantic necessity for that to happen, but because this process happens so often in language contact environments where a language learner uses a limited vocabulary of items from a second language. Terms develop unintentionally along linguistic frontiers.

Is it really correct to say, as Morphy (1996: 178) does, that the term was adopted because of ‘its salience to them”? Aranda speakers already had ‘Altjira’ and continued to use the term. It is the English word ‘Dreamtime’ which was used in the mistaken belief that it adequately conveyed the meaning of ‘Altjira’. Arrernte Elder Margaret Kemarre Turner (2010: 48) has said, ‘but we just got used to saying “in the Dreamtime”’.

Morphy’s argument about ‘heterogeneity of meaning’ is unclear. He seems to be implying that speakers were consciously using words in different ways. Wolfe (1997: 90, footnote 48) is correct in saying that Morphy fails to deal with the associations and
significations of words. The issue is one of translation, not of semantic necessity. How then can Morphy claim that Spencer and Gillen’s translations were accurate?

**Universality and Pan-Aboriginality**

In addition to its inadequacies as a translation of ‘Altjira’, ‘Dreaming’ is lacking in generality and universality. The Dreamtime loanword started in the Arandic speaking region. As Wolfe (1997: 81) has noted, linguistic diversity was minimised. The semantic connection between ‘dream’ and ‘Altjira’ was limited to Central Australia as, according to Dixon et al. (2006), ‘in other parts of Australia there is no direct association of this kind’. So the usefulness of ‘Dreaming’ as a key term of Pan-Aboriginality is diminished. Green (2012: 166) understates this paucity by saying that ‘expressions such as “in the Dreamtime” are not found in all Aboriginal languages’, when, in fact, it appears that the semantic connection is found in comparatively few of the over 200 languages that were originally spoken in Australia.

‘Dreaming’ was later adopted by people who spoke other Aboriginal languages, Aboriginal Englishes and Standard English. The fact that people who spoke languages for which there was no direct association with ‘dream’ adopted it, shows that the English word was borrowed with a particular meaning that was independent of the semantics of their first language. The word was popularised by Stanner and others, which led to the mistaken view that ‘Dreaming’ accurately conveyed the meaning of an Indigenous word. This kind of mistaken belief, or hoax, accompanied Pan-Aboriginality, the notion that the same semantic relationship would hold in languages across the continent. At the time of the adoption of the term into mainstream Australian society, Pan-Aboriginality dominated white Australian thinking about Aboriginal people and it is still influential.
The Invention of Dreaming

Dreamtime was an invention of the anthropologists. Patrick Wolfe (1997: 80) claims that the Dream came from the settler frontier discourse, thus plausibly identifying the way in which ‘the dreaming complex’ spread to speakers of other Aboriginal languages. Spencer (1904) proscribed the use of the term ‘religion’, according to Wolfe (1991: 207), because the term ‘magical’ was more useful for his purposes. Wolfe argues that it was useful for colonising forces to describe Aboriginal Reality in terms that were vague and irrational. The prevailing view propounded by evolutionary anthropology at that time was that Aboriginal people had primitive languages and no religion. Spencer and Gillen failed to deal with religion and language, which I would contend are exactly those things that make us human. It was not a case of Spencer’s relativism, contrary to what Morphy claims. Until the First World War, anthropology was a historicist and not a relativist discipline. Urry (1993: 98) claims that ‘as late as 1908, Marett argued that the real value of accounts of exotic cultures to anthropologists was in providing material to reconstruct the evolution of European society and culture’. In Urry’s opinion (1993: 45), Spencer ‘subordinated himself to Frazer’s concerns’. Spencer and Gillen were influenced by Frazer’s *The Golden Bough*, published in 1922, and the questionnaire which Frazer sent to fieldworkers, outlining what ‘facts’ were to be collected. Anthropologists were committed to the idea that Aboriginal people were different only in that they were passing through stages that Europeans had already passed through earlier in their historical development. Contrary to the claim of Austin-Broos (2010: 15), Spencer’s and Gillen’s account does not have greater plausibility in claiming that ‘Altjira’ referred to a higher and uncreated being, for that is not what they were claiming. Their attempt was to explain the evolution of religion (Cox 2013: 3), which required the development of key terms. ‘Dreaming’ is based upon essentialism, as Wolfe has identified. An opposition was made
between Enlightenment Europeans endowed with rationality, and the natives whose views were irrational and childlike. How do the language ideologies of the missionaries and the anthropologists compare? In his letter to the *Register* in Adelaide, Strehlow (1921) compared Aranda with Classical Greek, a language highly regarded in Germany during the Philhellenism of the nineteenth century. Strehlow praised the complexity of Aranda and its ability to convey multifaceted ideas. His view is in sharp contrast with the low estimation of the Aranda language which was made by contemporary anthropologists such as Marett and Tylor, who regarded Aboriginal languages as ‘primitive’ (Henson 1974: 10), and whose engagement with Aranda, through the fieldwork of Spencer and Gillen, would be through a limited set of key terms which would illustrate the primitiveness of Aranda people and the inevitability of their demise.

Henson (1974: 87) discusses the nineteenth-century appropriation of native terms: ‘Being unaware of the systematic nature of linguistic structures and the dependence of the elements of a cognitive system one upon the other, is once again evident in their use of certain linguistic categories taken from particular primitive societies to serve as technical terms of general application.’ Examples of this attempt at generalisation and universalisation are ‘mana’, ‘totem’ and ‘taboo’, terms which are taken from the so-called ‘primitive’ languages, that is, languages that were yet to evolve. Morphy’s (1996) argument is about the usefulness of Altjira as a term, as he avoids its meaning. In the view of Harvey (2013: 21): ‘Much of what has been written about mana or fetish, for instance, misunderstood what would have been more clear if researchers had listened to their hosts more carefully.’

**The Development of ‘God’**

The missionaries were also devising key terms and ‘Altjira’ became a key term for ‘God’.
The lexical gaps between the Christian context and traditional Aranda society required new terminology. There were two methods of developing new terms. One method was word formation – the development of nominals from verbs, as already mentioned above. Another was the re-purposing of existing terms. Abstract nouns were created from other word classes. Strehlow (1944: 71) claimed that adjectives such as ‘alkaralkara’, meaning ‘bright, shining’, were adopted as terms for ‘glory’. A word ‘nguanga’ meaning ‘harmless, peaceful’ was used as the term for ‘peace’. ‘Altjira’ became the term for the Christian God through a semantic shift that was induced by the missionaries. The personification of ‘Altjira’ meant that the agent or ergative marker was used to indicate what ‘Altjira’ did and this entailed a syntactic shift and a radical change in the understanding of ‘Altjira’ as it was used for ‘God’ in the translation of the Old and New Testaments of the Bible, for example, in the following translation from Exodus 20:

\[
\text{Jinga Inkata, Altjira unkwanga nama; Altjira nkarba nukanga iргungala nitjala nitjika}
\]

‘I am the Lord your God, you shall have no other gods before me.’

The search for a key term for the Christian God reflects a ‘Christian theological bias’ (Cox 2014: 21), which Spencer saw as a lack of objectivity. The initial translation of ‘gods’ was refined as the missionaries became more aware of the meaning of ‘Altjira’ and its use in another collocation meaning ‘mother’s totem’. From their statements about the meaning of the word (see, for example, Kempe (Spencer 1927: 596) and Strehlow (1907: 2)), it is apparent that they didn’t identify Altjira as being the same as the biblical God, but were working with an approximation or working definition of ‘Altjira’, as in Carl Strehlow’s (1909) wordlist:
Strehlow (1907: 2) was cautious in finding a linguistic derivation for Altjira. He claimed that when he questioned Aranda speakers, they responded,

\[ Erina \quad itja \quad arbmanakala \]
\[ 3.ACC \quad none \quad create-PC-RS \]

‘No one created him’

Strehlow didn’t etymologise, but reported what his informants had told him. Strehlow had dual roles. While engaged in ethnographic research, he was also a missionary to an Aboriginal community. The words which he researched for the lexicographic work were also terms which he used in his role as a Christian pastor. Their development as terms involved the extension of their meanings. Conflict between the missionaries and the anthropologists was unavoidable, given their very different worldviews and their competing claims in the literature about the meanings of the same words.
The Nightmare

The translation of ‘Altjira’ as ‘a dream’ has been problematic, as the ‘Dreamtime’ and ‘Dreaming’ became more widely used in Australian English and applied as key terms for understanding Aboriginal societies. The adoption of key terms as loan translations into English has had negative consequences, as Henson (1974: 30) asserts: ‘The legacy of these terms has presented anthropology in this century with problems which it has only been able to overcome by recognising the unreality of the terms.’

The result has been the trivialisation of Aboriginal religion and legal systems. As Trudgen (2000: 151) has observed, communities are in a state of legal crisis because there is no formal recognition by the dominant culture of the traditional legal processes that have existed on these lands for thousands of years. ARDS (Aboriginal Resource and Development Service) (1995) claims that the Anglo-Australian conceptualisation of Yolngu law as ‘the Dreaming’ is, for Yolngu, false and misleading (and insulting), suggesting that Aboriginal worlds are ruled by dreams rather than by reason. In the words of John Morton (2000:758):

Time and time again, Aborigines are spoken of as if they dwell in the Dreamtime, or used to dwell there before Europeans came to interrupt their slumber. This mystical association can be viewed positively or negatively: Aboriginal people have been romanticised and celebrated in terms of their deep spirituality, but they have also been denigrated for being primitive and childlike. Either way, the Dreaming is largely, if not exclusively, a shadow that others have cast upon them.

Arrernte Elder Margaret Kemarre Turner (2010: 47), says: ‘It’s not a dream, like a fairytale dream, it’s a Traditional Story, and that is in us.’
Conclusion

My focus has been on the language sciences of translation, etymology and intercultural communication. Firstly, ‘dream’ is not a translation of ‘Altjira’ because ‘Altjira’ and ‘altjira rama’ are members of different word classes. ‘Dreaming’ arose from anthropologists’ need to create a key term. Gillen was working with people who spoke very limited English and were unable to convey to him the meaning of complex terms. An interlanguage developed between speakers of different and partially incommensurable languages. Spencer and Gillen elicited information about ‘Altjira’ through the interlanguage, without taking account of how language was used by speakers. As monolinguals, who were unaware of other languages and basic translation theory, theirs was an atomistic and literalist approach, in which words were thought to have ‘core’ or ‘root’ meanings. They used leading questions to elicit key terms, which they attempted to translate into English. On the basis of their faulty analysis, they claimed to understand the meaning of ‘Altjira’ as ‘dream’. ‘Dreamtime’ was a mistranslation based on an etymological connection between ‘a dream’ and ‘Altjira’ which held only over a limited geographical domain. There was some semantic relationship between ‘Altjira’ and ‘a dream’, but to imagine that the latter captures the essence of ‘Altjira’ is an illusion.

In the late nineteenth century the emergent social sciences were trying to mimic the natural sciences, which meant downplaying the grey areas of interpretation. Scientism was a naïve realism which denied the limitations of observation and the biases of the observer’s perspective. Spencer avoided having to deal with ‘Altjira’ as religion. His literalism was a misapplied empiricism which denied a place to interpretation. Far from being an empirical and objective linguistic analysis, his findings were coloured by his attempt to prove that Altjira meant what he wanted it to mean. By contrast, the missionaries, with their grounding in mythology, translation, ancient languages,
linguistics and lexicography, were well placed to learn Aranda and to conduct linguistic research. Their approach was hermeneutic and observational.

‘Dreaming’ is a case of a term outliving its usefulness. Reconciliation between Indigenous and non-Indigenous peoples will require a more sophisticated understanding of Indigenous languages and societies and a re-think about the use of terms. To be respectful, we should reconsider our use of the word ‘Dreaming’, failing as it does to convey the complexity and richness of ‘Altjira’.

References


Moore, David, 2014. German Lutheran missionaries and the linguistic landscape of


Macmillan.

London: Macmillan.


Frankfurt am Main: Joseph Baer and Co.

(1907) Part 1: Myths, legends and fables of the Aranda tribe.


Strehlow, Carl, 1909. Vocabulary of the Aranda and Loritja native languages of Central Australia with German equivalents. Unpublished manuscript located at the Strehlow Research Centre, Alice Springs, NT.


Strehlow, T.G.H., 1947. Anthropology and the study of languages. Report of the twenty-sixth meeting of the ANZAAS, Perth. Located at the Strehlow Research Centre,


Turner, Margaret Kemarre et al., 2010. *Iwenhe tyerrye: what it means to be an Aboriginal person*. Alice Springs: IAD Press.


Texts and Grammar

Preface

After the collection of key terms and the compilation of wordlists, missionaries collected grammatical information. Kempe published the first Aranda grammar and wordlist in 1891. The grammar was presented in a format similar to that used for the familiar classical and modern European languages.

Strehlow was initially inclined to follow Kempe’s analyses. By the late 1890s he had noticed weaknesses in his predecessor’s translations and decided to revise the grammar. He changed his grammatical analysis more thoroughly by 1908 when he challenged Planert and Wettengel’s Aranda grammar. Superficially, Strehlow’s analyses appear to be no more extensive than Kempe’s. They described approximately the same number of grammatical morphemes. Both missionaries were interested in the possibility of translating relative pronouns. The best known of Strehlow’s grammars, compiled at some time between 1894 and 1908 shows the similarities. The Berlin linguist Wilhelm Planert differed from Kempe on the case analysis of Aranda, taking an Ergative-Absolutive analysis which appears to be innovative and a departure from Kempe 1891. But Wettengel and Planert closely followed Kempe’s grammar, misunderstanding some of the latter’s more vague statements and clearly misinterpreting some of the data. The following paper presents evidence that Strehlow’s grammars were more adequate and his translations were more accurate than those of his predecessor.

A key difference between Kempe’s grammar and Strehlow’s corpus is the collection of a large number of texts by the latter. The second paper examines Strehlow’s texts. His mentor Moritz von Leonhardi encouraged Strehlow to collect them, realising that they would provide the best evidence for their claims about Aranda language and culture. This accorded with the language ideology from the German philosophy of language that, ‘meaning is understood through actual language use’. They were collected from about 1906 until 1910. Although the manner of the recording of the Die Aranda texts without sound recording equipment and the editing process meant that they lacked the discourse organisation of natural texts, the interlinear texts and free translations were the major
stimulus to Strehlow’s revised grammatical analysis. The texts were most valuable for linguistic analysis, offering ‘relatively spontaneous and natural examples of speech, as well as data not restricted by the linguist’s imagination’ (Aissen 1992: 9).

It was the analysis of his Die Aranda texts which enabled Strehlow to better understand Aranda grammar. The texts went beyond Kempe’s illustrative sentences and showed the syntax of complex clauses.

In 1906 Felix von Luschan recorded Missionary Wettengel reading an Aranda text and the Lord’s Prayer in Dieri and Aranda. Unfortunately no other recordings are known from this era.

A question for future research is whether the training at Neuendettelsau Mission Institute more adequately prepared mission candidates to write grammars than those of their Hermannsburg predecessors. Their training at Neuendettelsau involved intensive training in the grammar of German and the classical languages. The humanist interests of the missionaries are reflected by the fact that, ‘similar to other linguists of their time, the missionaries’ grammatical description is usually stronger than their phonetics’ (Breen 2008: 135). In common with general linguists they had less interest in phonetics which was the central concern of positivist and universalist linguistics. But their grammars endured. Strehlow’s research was directed to the applied task of biblical translation and later became valuable for Die Aranda which became widely known in Europe. The grammars continued to inform later grammars of Central Australian languages by both linguists and missionary translators.

References


Developments in the grammatical analysis of Central Australian languages 1890-1910

David Moore

1 Introduction

A number of grammatical descriptions of Arandic languages from Central Australia appeared between 1890 and 1910. These reflect a variety of theoretical approaches to grammar which were emerging from German philology and linguistics in the early twentieth century. In this paper I show the development of Carl Strehlow’s grammatical analysis of Western Aranda (WA), comparing versions of his grammar with Kempe (1891a). I also discuss the Planert and Wettengel grammar (1907) which was contemporary with Strehlow’s grammars but which was clearly influenced by Kempe. A dispute between Planert and Strehlow in the pages of the Zeitschrift für Ethnologie (Strehlow 1908) throws the differences of their grammatical analyses into sharp relief. I focus on a range of grammatical categories, especially those for which Strehlow developed a more accurate analysis than Kempe and Planert.

By ‘analysis’ I mean primarily their explicit knowledge of the grammar in scholarly linguistic terms, as expressed in their written grammatical descriptions. I also highlight the value of Strehlow’s ethnological and religious translations in interpreting his understanding of Aranda grammar. Given the evidence of Strehlow’s analysis in his limited written grammatical description, and the analytical skills that this implies, it is
reasonable to infer from his translations what his explicit knowledge of some other aspects of Aranda grammar are likely to have been.

Strehlow’s grammars were the foundation of later analyses of Arandic language varieties. Later in the twentieth century, T.G.H Strehlow (1908-1978) extended the description of Aranda with *Aranda Phonetics and Grammar* (1944). Western Aranda (WA) was the first of the Arandic languages to be described and later grammars of Arandic languages and dialects were influenced by the tradition, for example, Alyawarr (Yallop 1977) and Mparntwe Arrernte (MpA) (Wilkins 1989). These languages can be understood in structural and genetic terms as a mesh of related dialects. The focus of this paper is specifically Western Aranda, but comparisons will be made to other dialects on some points.

Arandic forms are reproduced in this paper in the original spelling used in each source. Forms from Kempe’s and Strehlow’s works are cited in the Mission Orthography (Moore 2018). Forms cited from more modern sources on Arandic varieties use the accepted current orthography for that variety: Eastern and Central Arrernte as in Henderson & Dobson (1994), Alyawarr as in Blackman et al (forthcoming). Western Aranda has two current orthographies, exemplified by the spellings of the language name: *Western Arrarnta* in the Finke River Mission (FRM) orthography as in Roennfeldt et al. (2006) and *Western Arrernte* in the Institute for Aboriginal Development (IAD) orthography as in Breen et al. (2000).

In the discussion of the development of these missionary grammars, I consider the claim of Stockigt (2016: 446) that:

> Despite the better training received by Neuendettelsau missionaries in comparison to the Hermannsburg Mission Institute-trained missionaries, the grammars of Dieri and grammars of Arrernte written by the Neuendettelsau men are not of a noticeably different quality than earlier
grammars of the same languages by Hermannsburg Mission Institute-trained missionaries. C. Strehlow’s grammars of Arrernte are all less detailed than Kempe’s first grammar. That Strehlow replicated entire passages from Kempe’s work shows that he was to a substantial degree satisfied with the HMI missionaries’ analysis.

This discussion raises the issue of the importance of additional sources of grammatical information. An important source in Strehlow’s linguistic corpus is his (1907-20) *Die Aranda- und Loritja-Stämme in Zentral-Australien* [The Aranda and Loritja Tribes of Central Australia]. Its publication ‘placed Strehlow at the epicentre of early 20th century European thinking’ (Stockigt 2016: 381). The use of texts in language description developed from the German philosophy of language (Moore, forthcoming). The texts, translations, detailed footnotes and songlines which Strehlow collected show his overall linguistic corpus to be far more extensive than that of his predecessors or contemporaries.

Strehlow’s (1904) revision of Kempe’s hymnbook (1891b) shows specific points of contrast between the two translations, and gives evidence of the application of Strehlow’s higher level of grammatical competence in Aranda to his translation from German to Aranda. The Aranda New Testament which Strehlow translated in 1913-1919 was a further development of a translation program which culminated in T.G.H. Strehlow’s translation of the Aranda New Testament (1956).

In this paper, I firstly outline the sources. I then provide an overview of the grammar of the language with a focus upon the categories for which the grammars of Kempe, Planert and Strehlow are clearly in contrast.

## 2 Background and sources

The Hermannsburg Mission was established in the Northern Territory in 1877. The first substantial grammar of Aranda was that of Hermann Kempe (1844-1928), published in English in 1891 and based upon his research from the foundation of the mission.
Presumably it was originally written in his native German as Scherer (1973: 30) explicitly states that it was translated into English. However, no copy of a German original is known to exist.\footnote{A manuscript of Kempe’s published wordlist is housed at the Strehlow Research Centre in Alice Springs.} Throughout the grammar Kempe compares Aranda to English rather than German categories, for example (Kempe 1891a: 12), where he compares English and Aranda adverbs. The English native speaker and natural scientist Ralph Tate (1840-1901) edited Kempe’s grammar but ‘the nature of Tate’s edit is unknown’ (Stockigt 2016: 377).

Kempe’s grammar was widely cited and was the most comprehensive of the published grammars of Aranda until the appearance of T.G.H. Strehlow’s grammar in 1944. A grammatical description which was produced by Strehlow’s non-missionary contemporary R.H. Mathews (1907) closely follows the Kempe grammar. The chapter on ‘Language’ in Eylmann’s ethnographic work (1908: 80-102) is largely based upon Kempe’s grammar. Schmidt’s overview of Australian languages (1919: 196) refers to the Kempe grammar in his comparison of pronouns.

Wilhelm Planert elicited forms from the returned Missionary Nicol Wettengel in Berlin to produce a grammatical description of Aranda (Planert 1907). Although Planert (1908: 703) claimed: ‘That I was unable to use the work of the missionary Kempe, which was not accessible to me, is a defect in my study which I regret most vividly’, he appears to follow some of the analyses in Kempe’s (1891a) grammar closely. Wettengel had presumably had access to Kempe’s grammar in his time at Hermannsburg Mission.

Carl Strehlow (1871-1922) was trained in philology as the study of grammar, translation, classical languages, German and English at Neuendettelsau Mission Institute in the Franconian region of Bavaria in Germany from 1888 to 1891. After he arrived at Hermannsburg Mission in 1894 he became aware of the inadequacies of Kempe’s
grammar. He considered it ‘a work that, despite some mistakes, can still be considered a good one’ (Strehlow 1908: 698). He also recognised the limitations of Kempe’s translations, writing to his brother-in-law Christian Keysser in 1896 about the need to revise Kempe’s 1891 hymnbook (Stockigt 2016: 379). Strehlow’s hymnbook revision was published in 1904.

There are various versions and copies of Strehlow’s grammatical descriptions, but these can be divided into an earlier analysis and a later analysis – representing his developing explicit knowledge of Aranda grammar. The earliest Strehlow document is from an unknown date between 1894 and 1908:


A copy of the original handwritten manuscript is in the possession of John Strehlow. As Stockigt (2016: 382) notes, ‘it is probable that the original was Strehlow’s earliest analysis of Arrernte, since the copies resemble Kempe’s publication (1891) much more closely than do either Strehlow’s 1908 published grammar, or his 1910 MS grammar’. Two copies of a mimeographed version of this document exist and are wrongly attributed to Missionary Wettengel. One copy exists in the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) Collection in Canberra. Another copy exists in the Lutheran Archives in Adelaide (Stockigt 2016: 384). The mimeographed versions are copies of a handwritten copy which Stockigt (2016: 382) attributes to missionary E. Kramer and is dated 12/05/1931. The handwritten copy and mimeographed copies are clearly defective- see footnote 24.

These earlier manuscripts of Strehlow’s can reasonably be described as grammars because they cover a wide range of the morphology of Aranda, presenting extensive lists and paradigms. They
are generally sparse, with little explicit description in prose. Like other works of that period, there is only a very limited coverage of syntactic structures. The only work of grammatical description of Strehlow’s that was published is a limited response – less than five pages - to some aspects of Wettengel and Planert’s (1907) grammar, clarifying issues and comparing it with his own grammatical understanding of Aranda as it had developed at that stage:


Strehlow’s later analysis appears in another unpublished manuscript in 1910, and shows a number of developments over his earlier work:


A further copy is attributed to Pastor Ludwig Kaibel and is located at the Lutheran Archives in Adelaide. Kaibel visited Hermannsburg Mission in 1910 and presumably the manuscript dates from that time. There are extensive paradigm tables and limited prose description. The grammatical analyses are closer to Strehlow 1908 and Strehlow 1910.

Strehlow’s final relevant work is not an extensive grammar but a very brief summary of the grammar of Aranda that is part of a newspaper article he wrote (Strehlow 1921). This gives only a partial list of the major inflectional categories, and shows some differences in verb category labels from his 1908 and 1910 accounts. However it does not provide any explanation or exemplification that allows much comparison with his earlier analyses.
3 The purpose of missionary grammars

The fundamental purpose of these missionary grammars was for religious translation from German into Aboriginal languages (Moore and Ríos Castaño 2018), but both Kempe and Strehlow extended their reach to bring this knowledge to broader scholarly audiences. Strehlow’s grammatical analysis no doubt assisted him to translate the Aranda New Testament from 1913 to 1919 but it was also intended to complement the dictionary and text collection in ‘building a picture of the language’ in response to queries from his mentor Moritz von Leonhardi in Germany. The grammar both contributes to and draws on the texts and dictionary. As Franz Nikolaus Finck, a leading German linguist of the Humboldtian school, asserted in his communication to Leonhardi, grammatical analysis depended upon having adequate texts (Letter from Finck to Leonhardi 23. May 1908). The grammars were also intended to facilitate the understanding of the texts and songlines which were published in Die Aranda. Leonhardi wrote to Strehlow on the 9th September 1905:

For the moment, however, I cannot do much with the text as long as a dictionary and grammar are missing. I have been especially pleased by your intention to further continue with the collection of language, legends and customs and so to preserve them for science.42 (TRANS VL 1905-1-1)

The grammar and dictionary were originally intended to be published in Die Aranda but this did not eventuate.43 In comparing and analysing the early grammars I will give greater weight to the published document (Strehlow 1908) but also refer to Strehlow’s unpublished grammars.

---

42 The word ‘wissenschaft is translated ‘science’ here but could also be translated ‘scholarship’.

43 The dictionary has recently been published in a partially edited form: Strehlow, Carl. 2018 [1909].
4 Issues in grammatical description

4.1 Adequate grammars

A question is the degree to which the missionary language documentation is adequate. A good reference grammar should contain a grammar and a lexicon, not just a grammar, with an emphasis on morphology and syntax, and strong examples and texts (Rice 2005: 390). There should be a ‘wealth of data’, and this should be ‘appropriately explained’ (Rice 2005: 398). Each point in the grammar should be illustrated with appropriate examples and the examples should be taken from texts if possible.

Grammar was strong within the humanist tradition of philology. In their grammatical descriptions of Aranda and Loritja, the German Lutheran missionaries were influenced by the description of classical languages and modern European languages, applying semantic criteria to the description of grammatical systems. Where their grammatical description is more limited, I have attempted to use their other work from that period. A valuable supplementary source of grammatical information are the texts which were published in Die Aranda (Strehlow 1907-1920). There are five interlinear texts in Aranda and one interlinear text in both Aranda and Loritja to which I will refer. The biblical translations and dictionary44 are also sources of grammatical information and are also considered.

Although Carl Strehlow’s unpublished grammars of Aranda also contain Luritja equivalents in many cases, I have not used modern descriptions of Luritja to help understand his analysis of Aranda as Luritja is beyond the scope of this paper and requires further detailed research.

---

44 Strehlow’s dictionary (Strehlow 2018 [1909]) contains grammatical information which is yet to be investigated in depth, for example ‘downward motion forms’ (Moore 2012: 18).
4.2 Variation between Arandic varieties

In comparing the works of Kempe and Strehlow I am aware that they did not work with exactly the same speakers, so some of the differences between them may be due to dialect variation. The missionaries worked mainly with speakers of dialects that are now labelled as Western Aranda (Henderson 2018: 70), for which the grammar differs in varying degrees from other Arandic varieties. In (1), Wilkins (1989: 13) compares the Perception complement construction of WA with that of MpA: ‘Perception complements in MpA are signalled by the different subject switch-reference marker -rlenge attached to the dependent verb, while in WA they are signalled by –me-nge [Present-CR], also the different subject switch reference marker’

(1)

<table>
<thead>
<tr>
<th>WA</th>
<th>Ire</th>
<th>anteme</th>
<th>tnengkarre</th>
<th>are-ke</th>
<th>ketyeeye</th>
<th>mape</th>
<th>ulpaye-le</th>
<th>arrken-irre-menge</th>
</tr>
</thead>
<tbody>
<tr>
<td>MpA</td>
<td>re</td>
<td>anteme</td>
<td>Altyerre</td>
<td>are-ke</td>
<td>Ampe</td>
<td>mape</td>
<td>lhere-le</td>
<td>arrken-irre-rlenge</td>
</tr>
<tr>
<td>3sgA</td>
<td>now</td>
<td>Dream</td>
<td>see-pc</td>
<td>Child</td>
<td>Pl(grp)</td>
<td>creekbed-LOC</td>
<td>play-INCH-DS</td>
<td></td>
</tr>
</tbody>
</table>

‘She then had a dream about some children playing in a creek bed. (lit. She now saw in a dream some children playing in a creek bed’)\(^{45}\).

My analysis of the earlier historical materials is informed by my own unpublished analysis of Western Arrarnta, and informed by other more recent works on the language, notably T.G.H. Strehlow’s grammar (1944), and scholarly grammatical analyses of other Arandic dialects. I am also using my own knowledge of Anmatyerr, Eastern and Central Arrernte and Alyawarr to interpret and evaluate the previous analyses. There is not a

\(^{45}\) Wilkins inconsistently treats –menge in WA as a monomorphemic suffix but treats the same form in MpA as –me-nge, Non-past progressive + ABLATIVE.
modern scholarly grammar of Western Aranda with which to directly assess the missionary grammars, and this is a limitation on investigating the development of Strehlow’s analyses over time, and whether Strehlow’s analysis is an improvement on Kempe’s.

As grammatical categories, labels and analyses can vary between descriptions of the Arandic languages, I have tried to consult the most recent analyses for each individual language. The most useful structural comparison now is with Eastern and Central Arrernte (including Mparntwe Arrernte) for which there is a modern scholarly grammar (Wilkins 1989) and a dictionary with extensive grammatical information (Henderson and Dobson 1994). This comparison is undertaken cautiously as Arandic varieties sometimes use the same grammatical markers for different functions. For example, while +me /mə/ is used to indicate Present tense in Arrernte, in Alyawarr it is analysed as Potential mood (Moore 2012: 143), an example of grammatical ‘false friends’ (Moore 2012: 18). Aware of these differences, I am cautious in assuming that a grammatical element in Western Aranda will have the same functions as corresponding forms in other Arandic varieties. Each variety must be investigated separately to determine the range of functions of its grammatical morphemes.

4.3 Multifunctionality of morphemes

Many of the grammatical morphemes in Arandic languages are multifunctional. As an example, in Australian languages some suffixes have both causal and temporal functions. While Kempe (1891a: 6) recognised only a spatial sense of Aranda –iberna /ipəɾa/, Carl Strehlow (1908: 700, footnote 1) recognises its multifunctionality, as illustrated below.

46 I am following Wilkins (1989) in recognising both vowel-initial and consonant-initial morphemes.
Although he maintained that ‘its exact significance was not clear’ his analysis corresponds to the causal, temporal and spatial functions of Mparntwe Arrernte –iperre /ipəra/ (Wilkins 1989: 205-210).

Strehlow said that his ‘Causalis’ label or designation (Benennung) was only provisional but the uses of it could be shown by his examples:

(WEGNEHMEN, MOVEMENT AWAY)

(2) Deba kwatj-ibera alkirakera-ma
    bird water-CAUS fly-PRES

‘der Vogel vom Wasser weg auffliegt’ ['the bird flies from the water']

(SPRECHEN, SPEAKING ‘CONCERNING- TOPIC’)

(3) etna atu-ibera anka-rira-ma
    3PL man-CAUS speak-PL-PRES

‘sie über den Mann sprechen miteinander’ ['they discuss the man']

(TEMPORAL)

(4) ilku-mal-ibera era kamera-ka,
    eat-SS-CAUS 3S rise-PC

‘gegessen haben von (von Mahl) er aufstand’
[‘stand up after eating’]

Considering the contexts, position and word classes are important in determining the functions of suffixes. This is well illustrated with -nge /ŋə/ which occurs with both
nominals and verbs and there is a question as whether it represents a single morpheme or more than one homophonous morpheme. Due to its multifunctional character -nge /ŋə/ needs to be analysed with caution. Its occurrence with tensed verbs in dependent clauses is explored in §6.4.

5 Grammatical overview

Having considered in the preceding section the key issues in interpreting and comparing the various grammatical descriptions, we now turn to the differences between their accounts of nominal and verbal inflection.

5.1 Nominals

This section is a brief overview of the analyses of case in Aranda. In his analysis of case, Kempe forced Aranda into the mould of Latin by simply replicating the cases of Latin, and thus failed to demonstrate an understanding of the general principles of case analysis. Strehlow, with a more extensive and nuanced analysis demonstrates a more sophisticated understanding of such principles. Table 1 shows the analyses of the cases by Kempe, Planert and Carl Strehlow showing the differences in the set of case distinctions that each author analyses and the labels they use. The table represents the case distinctions for nouns only: all the grammars describe pronouns separately.

The table shows whether a form is analysed as case as opposed to another category. Kempe did identify the suffixes in the atuauna etc forms, and their meanings, but recognised them as ‘prepositions annexed to nouns as suffixes’ rather than cases. The table shows some over-distinction, as with Strehlow’s dative and accusative –na /ŋə/. It also shows under-distinction as with Planert’s Allative.
Table 1: Analysis of cases

<table>
<thead>
<tr>
<th>‘man’</th>
<th>Kempe 1891</th>
<th>Planert 1907</th>
<th>Strehlow 1908</th>
</tr>
</thead>
<tbody>
<tr>
<td>atua</td>
<td>Nominative</td>
<td>Absolutiv</td>
<td>Nominativ</td>
</tr>
<tr>
<td>atualata</td>
<td></td>
<td>Ergativ</td>
<td>Ergativ</td>
</tr>
<tr>
<td>atuaka</td>
<td>Genitive</td>
<td>Genitiv</td>
<td>Genetiv</td>
</tr>
<tr>
<td>atuana</td>
<td>Dative</td>
<td>Allativ</td>
<td>Dativ</td>
</tr>
<tr>
<td></td>
<td>Accusative</td>
<td></td>
<td>Accusativ</td>
</tr>
<tr>
<td>atuanauna</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>atuangai</td>
<td>Ablative</td>
<td>Ablativ</td>
<td>Ablativ</td>
</tr>
<tr>
<td>atuai</td>
<td>Vocative</td>
<td>Vokativ</td>
<td>Vokativ</td>
</tr>
<tr>
<td>atualela</td>
<td></td>
<td></td>
<td>Instrumentalis</td>
</tr>
<tr>
<td>atuiberai</td>
<td></td>
<td></td>
<td>Causalis</td>
</tr>
</tbody>
</table>

Table 2 shows their analysis of core grammatical cases, again showing the case distinctions and case labels but also individual functions of these cases. For the purposes of the discussion, two grammatical functions with the Recipient and Allative labels are recognised. The table shows the animacy split in relation to alignment and the case analysis. This split is not explicitly identified before Carl Strehlow’s grammar, but there is evidence that the variation in form at least was recognised in the earlier works. Kempe recognised the $\emptyset$ ~ -na /n̪ə/ variation in O function but wrongly attributed –na to a passive construction (1891a: 15). Strehlow was the first to recognise that it related to animacy, although his description omits some of the complexities.

The animacy distinction is categorised in Table 2 as animate vs inanimate, but the animates in the sentence examples in these sources are all actually of human status. In fact, modern data and analysis shows that the split is more complicated than solely animacy. None of the above sources show an inanimate noun (phrase) in recipient function.
The sources all show only the recipient form for the ‘Dative’ where it concerns transfer verbs, for example Kempe (1891: 3):

(5) Ata katjia-na nte-ma
1S.ERG child-ACC give-PRES
‘I give to the child’.

Table 2: The analysis of core grammatical cases

<table>
<thead>
<tr>
<th>Source</th>
<th>Grammatical function</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>Recipient</th>
<th>Allative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kempe 1891</td>
<td></td>
<td>Nominative</td>
<td>Nominative</td>
<td>Accusative</td>
<td>Dative</td>
<td>(‘preposition’ suffix –una /wəɳə/)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-la /la/</td>
<td>-Ø</td>
<td>-Ø</td>
<td>-na /ŋə/</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[in examples: inanimates –Ø animates – na /ŋə/]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planert 1907</td>
<td></td>
<td>Ergativ</td>
<td>Absolutiv</td>
<td>Nominative</td>
<td>Dativ</td>
<td>Allativ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-la /la/</td>
<td>-Ø</td>
<td>-Ø</td>
<td>-na /ŋə/</td>
<td>-na /ŋə/, -una /wəɳə/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inanim.</td>
<td>Nominativ</td>
<td>Akkusativ</td>
<td>Dativ</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-la /la/</td>
<td>-Ø</td>
<td>-na /ŋə/</td>
<td>-na /ŋə/</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inanim.</td>
<td>Akkusativ</td>
<td>-Ø</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ergative</td>
<td>Nominative</td>
<td>Accusative</td>
<td>Allative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-la /la/</td>
<td>-Ø</td>
<td>-Ø</td>
<td>-una /wəɳə/</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>anim.</td>
<td>Nominative</td>
<td>-Ø ~ -nha /ŋə/</td>
<td>Accusative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-la /la/</td>
<td>-nha /ŋə/</td>
<td>-nha /ŋə/</td>
<td>Allative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inanim.</td>
<td>Nominative</td>
<td>-Ø ~ -nha /ŋə/</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The modern analysis in Table 2 is not from a specific source but is represented in the modern FRM orthography (Roennfeldt 2006). It represents the unified case system approach advocated by Goddard (1982), which also takes into account the distinctions in the pronominal case forms, rather than Planert’s Ergative-Absolutive analysis of nouns.
only. Kempe (1891a: 3) did not analyse an Ergative case but did recognise the distinction between transitive subject and intransitive subject: ‘the nominative is expressed in a doubled manner, formed adding the particle [ie suffix] la’ (\(/lə/\). The word is unchanged, if connected with an intransitive verb,… but it is formed by adding the particle la, when it is unconnected [sic] with a transitive verb’. Planert (1907: 555) says that ‘Concerning case, it is to be observed that the absolutive can represent our nominative and accusative, the ergative marks the doer, and the allative replaces the dative and accusative.’ Strehlow’s 1908 grammar has adopted the Ergative analysis and label, moving on from Kempe’s Nominative analysis. However in Strehlow’s 1921 brief summary he returns to ‘a double nominative (transitive and intransitive)’.

5.1.1 Ablative - nga /ŋa/

Kempe (1891a: 3) uses the label Ablative for – nga /ŋa/ as meaning ‘shows the direction whence a thing comes’ and ‘signifies the cause for which a thing is done.’ It also ‘signifies the material from which a thing is made’ (Kempe 1891a: 3), for example ‘from mulga wood’. The example which Kempe gives for the ‘direction whence a thing comes’ illustrates only the source of the theme argument of the transitive verb meaning ‘take’. Strehlow (1910: 21) more clearly identified the spatial function, clearly showing – nga /ŋa/ occurring with motion verbs, which is not clear in Kempe:

<table>
<thead>
<tr>
<th></th>
<th>ekuranga</th>
<th>era</th>
<th>tmarana</th>
<th>Pitjalkuka</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3S.DAT-ABL</td>
<td>3S.NOM</td>
<td>home-ALL</td>
<td>come.back-PC</td>
</tr>
</tbody>
</table>

‘From there he came home’

---

47 This may have been a concession to a non-scholarly audience, although the article also includes terms such as ‘aoristus remitior’.
Kempe (1891a) inappropriately glossed atuanga as ‘for the man’. Following Kempe, Strehlow (1908: 700) exemplifies Ablative with *atuanga* ‘von dem Mann’ [from the man] See Table 1. He also follows Kempe in identifying a function of indicating a reference point for relative location (Strehlow 1910: 3) which is also found in Mparntwe Arrernte (Wilkins 1989: 186).

In recent descriptions of Mparntwe Arrernte -nge /ŋə/ is also labelled ‘Ablative’ (Wilkins 1989: 184). For nominals Henderson and Dobson (1994: 491-492) list thirteen main senses (–nge /ŋə/) including ‘comitative’, ‘means of transportation’ and ‘standard of comparison’ functions. There is also a temporal sense which ‘occurs with certain words for times, seasons, years etc.’ For example:

(7) uternenge alhwerrpenge
    ‘in the hot time’ ‘in winter’.

(Henderson and Dobson 1994: 492).

The temporal sense may be related to the homophonous Clause Relator /ŋə/ occurring with tensed verbs which is explored in §6.4.

5.1.2 Dative

Kempe’s treatment of dative shows some differences from Strehlow’s, and these can be attributed to Kempe’s more limited grammatical knowledge of Aranda. A comparison of Kempe’s hymnbook (Kempe 1891b) with Strehlow’s 1904 revision reveals that Kempe often misunderstood case and was unsure about which case form to use in translation. As I mentioned in the previous section, in Kempe (1891a) functions usually associated with

48 Wilkins (1989: 189) admits that he is ‘not presently sure of exactly how many senses (as opposed to functions) this form has’.
what is currently understood as the Dative and Ablative cases are combined in his ablative, exemplified by *atuanga* which is translated as ‘from, for the man’. The example sentence given is *jinga woringa tarama* ‘I laugh for the sake of the boy’ which should rather have contained the Dative *woraka*\(^49\). This is an example of a Latin framework constraining the description because of how the ablative case is understood in European languages and particularly Latin.\(^50\)

Kempe often confused the use of Dative and Accusative pronouns, presumably due to limitations of his grammatical competence in the language. In a number of instances in the hymnbook translation, Strehlow replaced Kempe’s first person singular dative *nuka* with accusative *jingana* in O function:

Psalm 23, Verse 2

English: ‘He maketh me to lie down in green pastures: he leadeth me beside the still waters.
German: Er weidet mich auf einer grünen Aue und führet mich zum frischen Wasser.

\(^{(8)}\)

Kempe 1891

<table>
<thead>
<tr>
<th>nama</th>
<th>dirkadirkuna</th>
<th>era</th>
<th>nuka</th>
<th>tmainamanga,</th>
<th>kwatja</th>
<th>kumiuna</th>
<th>Era</th>
</tr>
</thead>
<tbody>
<tr>
<td>grass</td>
<td>green-to</td>
<td>3S</td>
<td>DAT</td>
<td>lead-PRES.CR</td>
<td>Water</td>
<td>cold-to</td>
<td>3S</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>nuka</td>
<td>raitingama</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.DAT</td>
<td></td>
<td>lead-PRES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{49}\) This error was recognised in T. Strehlow’s copy of Kempe’s grammar where it is changed to ‘worraka’.

\(^{50}\) Greek for example only has five cases and no ablative case. The Latin ablative is ‘subsumed’ into the Greek genitive. The functions of the Latin ablative are divided between Greek genitive and the dative (Robins 1951: 59).
Appendix 1 shows Kempe’s translation of the full Psalm 23 compared with that of Strehlow 1904 and is representative of their translations.

5.2 Verbs
Arandic varieties have a rich set of inflectional and derivational distinctions in the verbal morphology. I have been selective in my treatment of particular forms in more depth and my discussion does not deal with all of the verb forms. The tables and discussion in this section do not represent the full range of verb forms.

A verb can consist of a sizeable number of morphemes. Consequently there is a large number of forms possible for each verb, for example:

(9) Tu-la.nara-ma-nга
    hit-DU-PRES-CR

‘If they (2) would hit’ (Strehlow 1910: 36).

---

51 Such constructions are analysed here as unitary grammatical words. Kempe and Strehlow analysed them as periphrastic constructions consisting of a main verb plus auxiliary verb and wrote them as separate words.
Kempe (1891a: 24) recognised this complexity, claiming that ‘not less than 300 different [words]’ could be formed from a single verb root. Kempe (1891a: 18) comments on the verb that, ‘the natives combine almost everything with the verb, which in English are expressed with adverbs of place, of time, of quality, of quantity etc.’ He identifies past, present and future tenses. He chose intransitive *nama ‘sit’ and transitive *tuma ‘hit’ as the examples for the major division of the verbs on the basis of their transitivity. Kempe (1891a: 15) arranges the inflectional paradigm with the intransitive and transitive verbs distinguished for each mood. This arrangement is typical for the classical languages with the primary categorization under Mood. Present, perfect and future tenses and Negation appear under the Mood headings. For Kempe –*ma for example is described as ‘Active Indicative Present Positive’. A comparison between categories of the verb in Kempe and Strehlow can be seen in Table 3. Kempe (1891a) and Strehlow (1908) present the tenses and moods as suffixes in tables, and with whole words in lengthy paradigm tables in Kempe (1891a) and Strehlow (1910). For the transitive verb *tuma Kempe then has a further division for Active and Middle voice and the Middle voice forms of *tuma. This was continued by Strehlow using the same verbs to exemplify transitive verbs and intransitive verbs and followed later by T.G.H. Strehlow (1944) and Yallop (1977). The elements in Table 3 are further characterised by Strehlow as indefinitum (unmarked for aspect) or definitum (imperfective aspect). For example –*ma Praesens indefinitum vs –*la *nama Praesens definitum. See §5.2.3.

A difference between the earlier sources and modern analyses is whether the inflectional forms are taken as unitary wholes or whether they are analysed as a sequence of independently-occurring suffixes, for example, the Participle –*manga in Kempe and Strehlow compared with the complex PRES-CR –*ma–*nga. See §6.4.1.
In his final grammatical note, from 1921, Strehlow re-works the labels of some of his categories but provides no detail or exemplification:

‘Aranda… possesses an indicative, conditional, optative, minative, and imperative, it has not only the usual tempora, present, imperfect, perfect, and future, but also three aorist forms, aoristus remotus, aoristus remotior, and a remotissimus; besides, it has a dual for all three persons.’ (1921: 11)

5.2.1 Tense

Both Kempe and Strehlow have a three-way analysis of tense with present, future and past. Oddly, Kempe (1891: 14) says of Aranda speakers that ‘they have very little notion of time’ which perhaps leads to his mistaken assumption that tenses could not be described accurately.

5.2.2 Past tenses

I analyse the –ka suffix as the Past Completive (PC) tense and –kala as consisting of PC with the State marker –ala /aɭə/. Kempe (1891a: 14) does not clearly distinguish these two forms: ‘the perfect tense is formed by adding the particle ka or kala to the root of the verb, as tuka, or tukala, “I have beaten.” He wrote that ‘the first [ie –ka] probably corresponds to the Imperfect and the latter [ie –kala] to the Perfect, though the natives themselves cannot explain the difference’. It is clear that Kempe is using the term ‘Imperfect’ to refer to what is a completed past tense in Aranda. The inflectional category of ‘Imperfect’ here does not specifically involve imperfective aspectual meaning. It was typical in German grammatical description of the time for the terms ‘Imperfect’ and

---

52 In his grammar of Mparntwe Arrernte Wilkins (1989: 225) has a two-way analysis of tense with ‘Non-Past Progressive’ rather than ‘Present’ for –me and ‘Non-Past Completive’ rather than ‘Future’ for -tyenhe
Table 3: Categories of the Aranda verb

<table>
<thead>
<tr>
<th>Marker</th>
<th>Kempe 1891</th>
<th>Strehlow 1908</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ma</td>
<td>Present</td>
<td>Praesens</td>
</tr>
<tr>
<td>-ka</td>
<td>Imperfect</td>
<td>Imperfectum</td>
</tr>
<tr>
<td>-tjina</td>
<td>Future</td>
<td>Futurum</td>
</tr>
<tr>
<td>-kala</td>
<td>Perfect</td>
<td>Perfectum</td>
</tr>
<tr>
<td>-tjita</td>
<td>Past (preterite)</td>
<td>Perfectum remotum I</td>
</tr>
<tr>
<td>-tjama</td>
<td>-</td>
<td>Perfectum remotum II</td>
</tr>
<tr>
<td>-la nitjama</td>
<td>-</td>
<td>Perfectum remotum II</td>
</tr>
<tr>
<td>-tjabuma</td>
<td>-</td>
<td>Historicum</td>
</tr>
<tr>
<td>-ma</td>
<td>Infinitive</td>
<td>Infinitivus praesentis</td>
</tr>
<tr>
<td>-mala</td>
<td>Perfect Participle</td>
<td>Infinitivus perfecti</td>
</tr>
<tr>
<td>-tjinala</td>
<td>Conditional future</td>
<td>Infinitivus future</td>
</tr>
<tr>
<td>-manga</td>
<td>Present Participle</td>
<td>Participium und Conditionalis Praesentis</td>
</tr>
<tr>
<td>-kalanga</td>
<td>-</td>
<td>Participium und Conditionalis Perfecti</td>
</tr>
<tr>
<td>-malanga</td>
<td>Conditional</td>
<td></td>
</tr>
<tr>
<td>-tjinanga</td>
<td>Future Participle</td>
<td>Participium und Conditionalis Futuri</td>
</tr>
<tr>
<td>-mara</td>
<td>Conditional</td>
<td>Optativus</td>
</tr>
<tr>
<td>-tna</td>
<td>Optative</td>
<td>Resolutivus</td>
</tr>
<tr>
<td>-ikana</td>
<td>Optative</td>
<td>-</td>
</tr>
<tr>
<td>-ai</td>
<td>Imperative</td>
<td>Imperativ</td>
</tr>
<tr>
<td>-iai, eai</td>
<td>Imperative</td>
<td>-</td>
</tr>
<tr>
<td>-tjika</td>
<td>Supine</td>
<td>Intentionalis</td>
</tr>
<tr>
<td>-mitja (kitja)</td>
<td>Negative ‘not’</td>
<td>Denuntiativus</td>
</tr>
</tbody>
</table>

53 Kempe 1891a: 15
‘Preterite’, i.e. primarily a simple past, to be used interchangeably. Notably, in Bauer’s High German grammar (1859: 41) he refers to ‘Preterit’ and ‘Imperfect’ as equivalent terms. In Bauer (1865: 53), concerning Latin grammar, the Imperfectum or Praeteritum refers to the noch unvollendete Vergangenheit ‘the still uncompleted past’. The Perfectum refers to the vollendete Gegenwart, ‘the completed present’. Planert (1907) and Strehlow (1908) introduce the term ‘Imperfectum indefinitum’ for –ka in contrast with the Perfect –kala in their grammars.

The suffix –tjita is now analysed as Past Habitual (cf. Wilkins 1989: 228). Kempe (1891: 14) sees –tjita as ‘very likely the Preterite’, but is not specific on this point, analysing it as a temporal rather than an aspectual distinction, where both –kala and –tjita are used for ‘remote time’ and that ‘both forms [his examples ilkukala and ilkutjita] mean ‘I have eaten’ but leaves it undecided whether yesterday or a long time ago’.

Strehlow labels –tjita as the Perfectum Remotum indefinitum54, and glosses it as in the following:

(10)    nitjita
Ich pflegte zu sein

‘I used to be’
(Strehlow 1910: 27).

54 I have not found this tense suffix in the Die Aranda texts even though the texts are mythical past narratives in which examples of this suffix typically commonly occur. In the texts in Wilkins’ Mparntwe Arrernte grammar, after the Past Completive –ke, the next most common tense was –tyerte ‘remote past habitual’ with 19 occurrences in traditional narratives (Wilkins 1989: 228).
In translation however it was used to describe single events in the remote past, rather than habitual events which occurred on more than one occasion (Paul Albrecht, pers. comm). Strehlow includes –tjama as ‘Perfectum Remotum II’, but Kempe does not report it at all. The current analysis for –tyeme in Mparntwe Arrernte is as a past progressive marker (Wilkins 1989: 227).

5.2.2.1 -ma Present tense
Kempe (1891a: 14) describes -ma as present tense, giving the example tuma ‘to beat’. He also describes what he calls an ‘infinitive’ sense of –ma, that is, ‘I beat’ or ‘I do beat’. Kempe claimed that there was ‘no other form to indicate [infinitive]’. This Infinitive analysis of –ma (§5.2.2.1) appears to be based upon the use of the label ‘infinitive’ for the citation form in English (Bernard 1975: 24), in its unmarked and non-finite base form. A ‘generic’ or omnitemporal use of -ma refers to a regular occurrence and habitual or conventional behaviour. Along with ‘Present’ (Table 3), Strehlow also describes the ‘Infinitive Present’ which describes customary and regular events:

(11) Matja kwata nana etna albmela-ma Kulbmura-ilkala-ma
     fire smoke this 3PL call-PRES “smoke rises up-PRES”

‘They call this smoke Kulbmura-ilkalama’

(Strehlow 1907: 23)

The arguments of clauses with the generic sense of Present are often non-definite e.g.

---

55 The Immediate Past suffix (Wilkins 1989: 227; Oberscheidt 1991: xii) is also not mentioned in the early works and requires further research.

56 This is evidence that Kempe was following English grammatical categories in his analysis.
5.2.3 Imperfective aspect

Kempe and Strehlow both include forms that indicate a continuing situation but analyse them in different areas of grammar. Kempe (1891a: 18) recognised a periphrastic construction consisting of a verb with the suffix –la– combined with the ‘auxiliary verb’ nama ‘to be, sit down’, illustrated by tula nama ‘to beat for a certain amount of time constantly’. However these forms do not appear in his example paradigms, as indicators of imperfective aspect or anything else. Planert (1907: 557) does not mention –la-nama. By contrast Strehlow’s definitum (1908: 701) clearly showed that –la nama marks imperfective aspect on the verb, for example, –ma Praesens indefinitum (aspectually unspecified) vs. –la nama Praesens definitum (imperfective).57 Recent grammars characterise this suffix as a continuous aspect marker.58 Representing aspect was presumably a challenge for the missionaries as German doesn’t overtly mark grammatical aspect, having no grammatical means for distinguishing the Progressive and the simple verb form (Kufner 1962: 33). For example, er wohnte can be translated ‘he lived’, ‘he was living’ and ‘he used to live’ (Donaldson 2007: 115). Although German is not able to directly represent the aspectual distinction between aspectually unspecified and imperfective forms of verbs, Strehlow nevertheless attempted to represent this distinction in Aranda with the glossing of his examples, for example:

57 Planert (1907: 557) uses ‘definitum’ (Bestimmte) to refer to Kempe’s participles, as distinct from the bare tensed verb forms ‘indefinitum’ (Unbestimmte). The question of the source of this terminology needs further research. He also used this terminology in his Dieri grammar (Planert 1908). See also Nekes 1911. The term originated with him but may have been used by others.
58 Capell (1958: 12) uses the definite/indefinite distinction for Aranda: ‘the indefinite form is the simple form’.
Ich bin gerade damit beschäftigt zu schlagen (Strehlow 1910: 43).

‘I am busy hitting’.

5.2.4 Mood

Kempe (1891: 15) identified ‘three chief moods’: Indicative, Conditional and Imperative. He also lists ‘accessory moods’ and ‘sundry moods’.

Strehlow (1908) re-classified the moods. Later, Strehlow (1921) also added the Minative and the Optative to the earlier set. Moods in Kempe and Strehlow (1908-10) are compared in Table 4.

Kempe (1891a: 15) uses the term ‘Conditional’ for –mara. He does not consistently translate it with a conditional meaning as for example with ta ilkumara ‘I should eat’.

Strehlow (c.1910: 28) analyses it as Optative: Ich möchte sein, ‘I want to be’ with a volitional meaning similar to the meaning of the Hypothetical in simple clauses in Eastern and Central Arrernte (Wilkins 1989: 233).

Table 4: Comparison of Moods in Kempe 1891a and Strehlow (1908-10)

<table>
<thead>
<tr>
<th>Marker</th>
<th>Kempe 1891a</th>
<th>Strehlow 1908-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>-mara</td>
<td>Conditional</td>
<td>Optatif</td>
</tr>
<tr>
<td>-ai</td>
<td>Imperative</td>
<td>Imperatif</td>
</tr>
<tr>
<td>-mitja</td>
<td>-</td>
<td>Denuntiativus, Minative</td>
</tr>
<tr>
<td>-manga</td>
<td>Participle</td>
<td>Conditionalis, Participium</td>
</tr>
<tr>
<td>-tjika</td>
<td>Supine</td>
<td>Intentionalis, Obligatif</td>
</tr>
</tbody>
</table>


60 Yallop (1977: 58) lists –mara as ‘Conditional’ for Western Aranda and four related Arandic varieties. For Alyawarr, Yallop (1977: 56) claims that –imira could be ‘potential’ or ‘conditional’. Yallop didn’t recognise the dependent clause marker +enty as Conditional for Alyawarr (Moore 2012: 153).
The Participle suffix –manga is examined in §6.4.1. I analyse –mitja/–kitja as the Aversive suffix. Wilkins (1989: 213) describes the corresponding morpheme in Mparntwe Arrernte as indicating ‘that the main verb action is, or should be, done in order to avoid the bad event indicated in the verb stem to which [this morpheme] attaches.’ For Western Arrarnta Oberscheidt (1991: x) glosses it as ‘lest, might, immediate danger’.

Kempe (1891: 16) mentions that –mitja is ‘difficult to designate’ and is not categorised as a specific mood:

(14) Lai! ta ngana tu-mitja
go-IMP 1S.ERG 2S.ACC hit-AVER

Go! I you not beat! i.e. go, that I do not beat you!

Following Kempe, Planert labels –mitja ‘Potential’, which does not capture its reference to negative consequences. Rather he translates it as though it is a desiderative:

(15) Tu-kitja
hit-AVER

Möchte schlagen
‘Want to beat’. (Planert 1907: 561).

Carl Strehlow (1908: 701) adopted the label ‘Denuntiatus’ and appears to have adopted the label ‘Minative’ later61 (Strehlow 1910: 47), both of which recognise its use to warn of negative consequences and describe its function better than its characterisation by Kempe or Planert.

61 The term ‘Minative’ is from Latin mināri ‘threatening’ (Macquarie Dictionary (2013: 1367). Cf. English minatory which is defined as ‘menacing, threatening, admonishing’.
6 Syntax

The earlier Aranda grammars parallel traditional grammars in focusing on verbal and nominal morphology, and don’t have as much structured discussion of syntax. They focus upon the relative pronoun based upon the existence of relative pronouns in European languages, however there is no discussion of coordination or subordination. There is also no discussion of nominal phrase structure or constituent order within clauses or sentences. Even if Kempe had been more skilled in grammatical analysis, his ability to accurately describe some syntactic phenomena would have been restricted by the limitations of his competence in Aranda. Such a limitation can be seen in his translations into Aranda. For example, in Psalm 23 verse 4 (See Appendix 2) the –la Instrumental suffix in *tnamala unkwanga* (digging stick–INST 2sg:POSS) should be placed at the end of the nominal phrase, as Strehlow’s (1904) revised version has it, *tnama unkwangala*.

In the following sections I examine Kempe’s and Strehlow’s treatment of relative pronouns and dependent clause types.

6.1 Relative pronouns

Both Kempe and Strehlow were interested in the way in which the relative pronouns of English or German could be translated into Aranda. In the analyses in his first unpublished manuscript Strehlow appears to have followed Kempe’s grammar closely but in his later works he developed a better understanding of dependent clause marking than his predecessor, which I demonstrate in the following sections. While Aranda had no distinct class of relative pronouns, Kempe gives an account of how a demonstrative pronoun acts as a relative pronoun:
Atua nala, nana tmurka albuka, worana tukala
man This this yesterday went away the boy has beaten

“man this, this yesterday went away, the boy has beaten” (Kempe 1891a: 11).

i.e “The man who went away yesterday has beaten the boy”.

In this example, nana tmurka albuka is a dependent clause with nana ‘this’ supposedly having the function of a relative pronoun. However it is difficult to find evidence that this construction was an authentic clause construction in Western Aranda at the time. T.G.H. Strehlow (1944: 101 cited in Stockigt 2016: 437) claimed that it was a calque from German or English relative clauses for the purposes of translation.

Kempe (1891a: 11) claims that English relative pronouns, or presumably just their subordinating function, can alternatively be expressed in Aranda by a ‘participle of the verb corresponding with the English participle’. It is not clear from Kempe’s explanation what this ‘participle of the verb’ refers to in (17) below [my morpheme glosses], although it is probably ‘leaning’ as he elsewhere associates Participles with English –ing marked verbs. None of the three forms which he identifies as ‘participles’ in Table 7 are found in his example. He also does not clearly identify the syntactic structures that are involved in clause subordination.

(17) ilupa tera ilta-la mbaka-tna-ra-ka-la jira-ka
axes two on house were leaning disappeared
axe two house-LOC lean-DU-PC-RS disappear-PC

‘The two axes, which were leaning on the house, disappeared’.

(Kempe 1891a: 11)
As Stockigt (2016: 433) explains, the relative clause marker RS –ala is difficult to
distinguish from the Same Subject (§6.3) and Locative markers (which may be a single
morpheme) in the Mission Orthography in the earlier works. The problem is one of phonological under-differentiation and raises the question of whether orthographic –kala might be conflating two distinct forms /kə-la/ PC-SS vs /k-aɭə/ PC-RS. Stockigt (2016:
434) gives /kala/ PC-SS as a possible analysis for the verb, however it is more likely that Kempe’s example involves Resulting State /k-aɭə/. (§7.1). On that basis, his translation of the relative clause above is grammatical, but his analysis is deficient.

In his earlier manuscript Strehlow sought evidence in earlier sources (Stockigt 2016: 436-
437) that the demonstrative pronoun could be used as a relative pronoun, giving a similar example to that of Kempe:

(18) Atua lena, **nana** lata pitji-ka-la, mara na-ma
    man dieser **der** heute gekommen ist gut ist
    man this here today come-PC-RS good be-PC

“That man, the one who came today, is good.”

The second of Strehlow’s examples cited by Stockigt (2016: 435) shows that in his earlier manuscript Strehlow closely followed Kempe’s grammatical analysis (Table 7), in this case of –mala as the ‘Perfect Participle’:

---

62 For iltala in this example Kempe’s interlinear gloss makes it clear that ampeke-tmeme occurs with a locative argument in Locative case. See for example mpukaanama (Roennfeldt et al 2006: 77) which utilises the suffix –lela, glossed as ‘Accompaniment’: ‘with, in the company of’. (Pfitzner and Schmaal 1991: 36). Another example involving the same verb root and the Lower Arrernte Locative suffix -eng is found in (Humphris 2017: 89). This means that a ‘relative clause interpretation’ marked by a relative clause marker –ala on ilta ‘house’ (Stockigt 2016: 433) is improbable.

63 Example (383) from Humphris (2017: 132) shows the difficulty of distinguishing Prior.SS –ekel and PST-REL –ekarl, even with a phonemic transcription. Although the verb of the dependent clause has been glossed ‘SS’ it clearly has a Different Subject interpretation.
(19) Ara nana unta nguraka ntaina-mala anderana-ka
Känguru dies da du gestern gespeert fett war
kangaroo This 2S.ERG yesterday spear-SS fat be-PC

Der Känguru das du gestern gespeert hat, war fett.

“The kangaroo that you speared yesterday was fat.” (Strehlow c. 1907: 25)

Strehlow (1908) changed his analysis of –mala as ‘Perfect Participle’ to ‘Infinitive
Perfect’ presumably because it marked dependent verbs comparable to the Infinitive
Perfect in German (Bauer 1859: 46; Duden 1912: 59). See Table 6.

6.2 Dependent clause types

In this section, I examine those complex sentence constructions where a dependent clause
is marked with the Same Subject –la suffix, Resulting State –ala suffix, or the Relative –
nga suffix, all of which occur after tense-marking. I have re-analysed the morphological
structure of Kempe’s and Strehlow’s main forms, and provide their phonemic
equivalents, in Table 5.

Table 5: Re-analysis of inflection: tense/aspect suffixes and the complexes they form with
following elements.

<table>
<thead>
<tr>
<th></th>
<th>Same Subj -la /-la/</th>
<th>Resulting State -ala /-ala/</th>
<th>Resulting State+Clause Relator -ala-nga /-ala-ŋa/</th>
<th>Clause Relator -ŋa /-ŋa/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>-ma /-ma/</td>
<td>-mala /-mala/</td>
<td>(-mala /-mala/)</td>
<td>-manga /-manga/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PastCompl</td>
<td>-ka /-ka/</td>
<td>-kala /-kala/</td>
<td>-kala /-kala/</td>
<td>-kanga /-kanga/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PastHab</td>
<td>-tjita /-tjita/</td>
<td>-kalala /-kalala/</td>
<td>-kalala /-kalala/</td>
<td>-kanga /-kanga/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PastProg</td>
<td>-tjama /-tjama/</td>
<td>-tjmala /-tjmala/</td>
<td></td>
<td>-tjanga /-tjanga/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future</td>
<td>-tjina /-tjina/</td>
<td>-tjinala /-tjinala/</td>
<td></td>
<td>-tjanga /-tjanga/</td>
</tr>
</tbody>
</table>

64 A transcription error appears in the typescript version cited by Stockigt (2016: 435): ntainatnala spear-? REL, rather than the correct form found in Carl Strehlow’s handwriting: ntainamala. spear-SS.
Kempe (1891a: 16) analyses -manga, -mala and -tinanga as Present, Perfect and Future Participles. The suffixes are not recognised explicitly as marking dependent clauses although some of his glosses at least seem to imply that they do. He gives the meaning of ‘the Participle’ as ‘doing, as doing, while doing, etc’, apparently attributing imperfective aspect to his Participles.

6.3 -la /lə/ Same Subject marker

Same Subject (SS) indicates that the Subject of the main clause and the dependent clause have the same reference. Tense is relative in this context. In Eastern/Central Arrernte, Same Subject -le /lə/ may occur with tense suffixes PRES -me, PC -ke, HAB -tyarte and FUT -tyenhe (Henderson and Dobson 1994: 458).

In Western Arrarnta (Oberscheidt 1991: x) and Mparntwe Arrernte (Wilkins 1989: 474) the combination of Present Tense and SS indicates that two actions or events may be seen as simultaneous or in sequence:

```
   (20)   Era    ilapa-la   irna   tu-mala   mpaara Ma
          3S.ERG  axe-INSTR  Tree    hit-SS    make-PRES
```

‘She uses the axe to shape the timber’ (Roennfeldt et al 2006: 119). [FRM orthography]

With +ke PC and +tyenhe Future, the events are sequential or overlapping, not simultaneous.

Strehlow labels –mala as ‘Infinitive Present’ (See Table 3 and Table 6). His translations reflect his understanding of -la as marking a dependent clause within a complex sentence but not specifically same subject. Although he does not explicitly describe the dependent-marking function or the same subject constraint for –la, his grammatical classification
recognises the former through the similar treatment of -la forms in his analysis of Perfect Infinitive and Future Infinitive, as shown in Table 6. Strehlow appears to have adopted the Infinitive analysis from Bauer’s German Grammar (Bauer 1859).

Table 6. Infinitive markers in Bauer and Strehlow

<table>
<thead>
<tr>
<th>Category: Infinitive</th>
<th>Bauer 1859 (German)</th>
<th>Strehlow 1908 (Aranda)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>trag-en</td>
<td>-ma</td>
</tr>
<tr>
<td>Perfect</td>
<td>getragen haben</td>
<td>-mala</td>
</tr>
<tr>
<td>Future</td>
<td>tragen warden</td>
<td>-tjinala</td>
</tr>
</tbody>
</table>

Whatever the validity of the label, he at least recognises that SS represents a dependent clause marker, which is more accurate than Kempe’s and Planert’s analysis.

6.3.1 -mala /-mala/

My analysis of the orthographic form –mala, as in (21), is /mə-la/ - Present tense PRES with the Same Subject marker (SS) marking dependent clause status. There is a possible phonological under-differentiation and raises the question of whether orthographic –mala might be conflating two distinct forms /mə-la/ PRES-SS vs /m-a|a/ PRES-RS which means that some examples of –mala are actually PRES-RS (See §7.2.2). With the /mə-la/ PRES-SS construction the events are contemporaneous, which therefore relates the dependent event and the main event as components of a single situation. This includes closely preceding the main clause event, simultaneous and maybe even closely following the main event. It often functions to express a close sequence of events, as in (22). Kempe and Strehlow focus on such sequences where –mala indicates an event within a sequence of non-overlapping events; one event is completed and then the other follows. Neither of them recognise the same subject constraint. The crucial difference between them is that
Kempe’s description gives no indication that, –*mala* is a dependent clause marker, whereas Strehlow does (See Table 6). Kempe (1891a: 16) labels –*mala* as the Perfect Participle, a past imperfective marker, and translates *tumala*, for example, with a past imperfective reading (1891a: 16, 32):

(21)  
Ta tu-mala  
1S.ERG hit-SS  
‘I was beating’

In Planert’s (1907: 565) texts, –*mala* marks a main verb and he labels it the *Imperfectum definitum* (1907: 558), translating it with the German imperfective past, in contrast with Perfect indefinite –*kala*. For example *pitjimala* is translated *waren kommend*, ‘were coming’. For the examples in his ‘Divine Kangaroo’ text Strehlow translates it as follows:

(22)  
Etta ilku-mala  
Sie gefressend habend wieder nach dem Lager umkehrten  
3PL eat-PRES-SS again camp-ALL return-PC  
‘Nachdem sie gefressen hatten, kehrten sie wieder nach ihrem Lager zurück’

‘After they had eaten, they went back to their camp’ (Strehlow 1908: 13).

Although neither Kempe nor Strehlow seem to focus upon the simultaneous events function, as I explained in §5.1, in (22) Strehlow recognises –*mala* as marking dependent verbs, seeing the event in a –*mala* clause as preceding the event in the main clause.

6.3.2  **–tjinala /-caŋala/**

I analyse this morpheme as FUT+SS. It marks a verb which describes an event that is subsequent to the event of the main clause. There is no requirement that the event actually takes place, hence Oberscheidt’s (1990: 49) gloss ‘being about to’. Kempe (1891a: 31) translates the paradigm examples of his Future Conditional as though they were modal,
e.g. ta tutjinala ‘I shall perhaps beat’ and jinga nitjinala ‘I should be’. Planert does not record this suffix. As is indicated by Table 6, Strehlow implies that -tjinala is composed of Future tense and the same –la marker that occurs in –mala, but he does not give an independent account of this –la. As noted above, it is analysed here as the –la Same Subject marker on a dependent clause. He labels –tjinala as the Infinitive Future, translating his paradigm example as Wenn ich hier bleiben ‘when/if I stay here’ (Strehlow 1910: 28). This is close to Bauer (1859: 46) whose Infinitive Future is illustrated by, for example, tragen werden ‘will wear’.

6.4 Participles and Clause Relator (CR)
Like Same Subject, Clause Relator (CR) /-ŋə/ marks a dependent clause type which indicates an event that occurs relative to the event which is described by the main clause. This analysis is similar to that for a related /-ŋə/ suffix in Eastern and Central Arrernte (Henderson and Dobson 1994: 492). Unlike Same Subject, there are no constraints on common arguments in the dependent and matrix clauses. CR /-ŋə/ is homophonous with the marker of the Ablative case (§5.1.1) but occurs with verbs, following a Present, Past, or Future tense, or Resulting State or Negation marker.

There is a connection between the two events that may be causal, translated as ‘because’ (something happens), or simultaneous (while, when). For example, Present -ma-nga means ‘simultaneous with the event of the main clause’ and Future –tjina-nga is ‘after the event of the main clause’. The action described by the clause with CR is often the reason or goal for the action of the main verb. I now consider the missionaries’ descriptions of the functions of their suffixes that I analyse as suffix combinations with CR. The missionary grammarians subsumed CR within what they analysed as the suffixes of their category ‘Participle’ for the most part. See Table 6. Strehlow recognised that three
suffixes (his ‘Participles’) which incorporate /ŋə/ nga (Present, Perfect and Future) had similar meanings which he classified as both Conditional wenn ‘if’ and Participial indem ‘while’. Kempe (1891a: 24) appears to recognise /ŋə/ as a distinct element which he called the ‘termination of the participle’ in his comments on the –eikananga suffix.65

Strehlow has the one following example of NEG-CR:

(23) Unta li-tjikana-nga ta ngana tu-mitja
2S.NOM go-NEG-CR 1S.ERG 2S.ACC hit-APP

(Strehlow 1910: 42)

Although the source text lacks a translation it could be translated as: ‘If you don’t go, I will hit you.’

Table 7: Participle markers in Kempe 1891 and Strehlow 1908

<table>
<thead>
<tr>
<th>Category</th>
<th>Kempe 1891</th>
<th>Strehlow 1908</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Participle</td>
<td>-manga</td>
<td>-manga</td>
</tr>
<tr>
<td>Perfect Participle</td>
<td>-mala</td>
<td>-kalanga</td>
</tr>
<tr>
<td>Future Participle</td>
<td>-tjinanga</td>
<td>-tjinanga</td>
</tr>
</tbody>
</table>

65 However he didn’t clearly distinguish –eikana Modal from -tjikana Negation (Wilkins 1989a: 463). See §4.3.
6.4.1 -manga /-məŋa/

As noted above, my analysis of -manga is PRES+CR. I discuss its functions in the following sections: Perception complement (§6.4.1.1); Causal (§6.4.1.2); Temporal (§6.4.1.3) and Conditional (§6.4.1.4).

The analysis of dependent clause markers is lacking in Kempe 1891a and they are presented as occurring in independent clauses. Kempe (1891a) appears to have an implicit understanding of them as dependent clause markers as his use of ‘while’ in glosses implies that there is a main clause, however his analysis is open to misinterpretation.

Kempe (1891a: 16) labels –manga as a Participle. From his paradigm tables and translations it appears that he is using ‘Participle’ to indicate meanings which involve imperfective aspect:

(24) Ta tu–ma–nga
    1S.ERG hit-PRES-CR

‘I am beating’.

His imperfective analysis is closest to the temporal function of CR marking a contemporaneous event, and is probably the reason why he analysed it as though it were a temporal and aspectual marker on verbs in independent clauses. Throughout his grammar ‘participle’ is used to refer to elements that are glossed with English –ing forms. His identification of ‘Participle’ with imperfective aspect was probably because English uses –ing forms for both the English Present Participle and imperfective aspect on a verb.

---

66 One possible reason for this is that complex sentences were encountered infrequently in speech. TGH Strehlow (1944: 107) claimed that, ‘it must be stressed at all times that the native speaks almost entirely in co-ordinate sentences, and not in subordinate clauses, depending upon one principal clause’. But although numerous examples of complex clause constructions are evident in texts, clause subordination is less frequent in speech than in writing.
Planert’s (1907: 557) Praesens definitum has the same paradigm example as Kempe but the translation is in German: ‘Ich bin schlagend.’ This BE+Participle construction is not usual for German and appears to be a calque or literal translation of the English BE+Participle ‘I am hitting’ from Kempe 1891.

Strehlow was aware that –*manga* had more than one function, which is evident from his description and his translations. In his reply to Planert (Strehlow 1908: 701 footnote 1) he identifies two functions of –*manga*, using the label ‘Participium und Conditionalis praesentis indefinitus’. Strehlow glosses these as German conditional *wenn* ‘if’ (§6.4.1.4) and temporal *indem* ‘while’ (§6.4.1.3) in his 1908 article, but in his translations he also uses *dass* ‘that’, *als* ‘as’ and *da* ‘because, since, as’ to translate the ‘Participial’ functions (perception complement, temporal and causal) which are explored in the following sections.

6.4.1.1 Perception Complements

A common occurrence of –*manga* is in Perception Complement clauses where a verb of perception such as *rama* ‘see’ occurs in the main clause. The notional subject argument of the Perception Complement clause is co-referential with the object argument of the main clause:

(25)  

<table>
<thead>
<tr>
<th>Atu-la</th>
<th>ra-ka</th>
<th>ara</th>
<th>longa</th>
<th>indora</th>
<th>lamanga</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann</td>
<td>sah</td>
<td>Kanguru</td>
<td>weit</td>
<td>sehr</td>
<td>gehend</td>
</tr>
<tr>
<td>Man-ERG</td>
<td>see-PC</td>
<td>kangaroo</td>
<td>far</td>
<td>very</td>
<td>go-PRES-CR</td>
</tr>
</tbody>
</table>

‘Der Mann sah, dass das Känguruh einen grossen Vorsprung vor ihm hatte’

Literal: ‘The man saw the kangaroo going along far away’.

‘The man saw that the kangaroo had gained a big lead over him’ (Strehlow 1907: 36).
The CR dependent clause marker is not glossed separately in his interlinear gloss but in the free translation the German Subordinate clause conjunction *dass* is used to translate the clause with –*manga*.

Carl Strehlow was followed by T.G.H. Strehlow (1944: 323), who was the first to explicitly recognise the same subject constraint, at least for the present tense, differentiating –l– and –ŋ– forms (corresponding to –*mala* and –*manga*) ‘the –l– forms are used when the participle is used as an adjective agreeing with a noun, and also sometimes when it is a participle agreeing with the subject of the sentence’.

### 6.4.1.2 Causal

Kempe’s examples do not illustrate the causal function of –*manga*. Strehlow glosses it with German *da* ‘because’, clearly reflecting the causal function of –*manga* which can be seen in the following:

(26) Atula tueljilaka, era manjerkulawuka, ara Mann legte Speer zurecht, er vorbeiwurf, Känguruh
    Man placed the spear he missed kangaroo
    parpa indora lamanga.
    schnell sehr gehend.
    quickly very going

‘Der Mann aber legte den Speer in die mera, warf jedoch vorbei da das Känguruh schnell davonlief.’

‘The man readied his spear in the *mera* but his throw missed because the kangaroo had fled in a hurry.’ Literal: ‘because the kangaroo was going very fast’.

(Strehlow 1907: 33, Oberscheidt English translation, page 41).
6.4.1.3 Temporal

The temporal interpretation of –manga involves events which occur simultaneously. CR and SS both mark a dependent clause and can both involve events which happen simultaneously. However, the Clause Relator does not have the same subject constraint. The dependent clause precedes the higher clause and the function of the Clause Relator temporal is to establish the reference time of the complex sentence. Kempe has no explicit analysis of this function of the Clause Relator, but gives this example which appears to lack a temporal reference:

(27) Parpala limanga birala limalakatana
Quickly when going tree seem to go

‘When quickly going the trees seem to go’.
(Kempe 1891a: 16)

The temporal function is frequently encountered in Strehlow. His explicit association of –manga (Strehlow 1908: 701, footnote 1) with ‘Participle’ shows this clearly. He consistently glosses -manga with the German Present Participle and da ‘as, while’ and als ‘while’ in the free translation.

(28) Eratara laramanga rala nariraka apma kngarra indora
Sie beide gehend sahen Schlange groß sehr
Both of them going seeing Snake big very

‘Als sie hingingen, sahen sie, daß die Schlange sehr groß war’

67 As the event described by limalakatana which appears to have no temporal reference is one of viewpoint katana ‘mistakenly thinking that’ (Pfitzner and Schmaal 1991: 67) and the sentence is generic rather than having specific temporal reference.

68 In his letter to Leonhardi in May 1908 F.N. Finck said: “When the so-called Present Participle in German is expressed though the subordinate clause with ‘when’ or ‘while’, perhaps it would be better referred to as a Gerund.” Finck was apparently referring to the temporal function of -manga. The term ‘Gerund’ is often used to refer to a ‘verb form that is functionally similar to a noun’ (Huddleston and Pullum 2002: 32).
‘As they went towards the snake they noticed that it was very big.’
(C. Strehlow 1907: 21).

6.4.1.4 Conditional

T.G.H Strehlow (1944: 311) claims that –manga verbs ‘form the protasis of a Conditional Sentence’, as in (29). A common pattern in languages of the world is for information in the protasis and apodosis to be non-factual (Palmer 1986: 189), and this function of -manga can indicate non-factual status. The suffix has a similar function to that of the Irrealis +enty in the related Arandic language Alyawarr (Moore 2012: 144).

Kempe did not explicitly discuss a conditional meaning of –manga, but it is clear in his free translation of an example sentence (1891a: 23) which illustrates a different suffix:

(29)

Unta nala namanga, kalja nuka ilumalamikana
2S.NOM here be-PRES-CR brother My die-MOOD

‘If you would have been here, my brother would not have died’

While Kempe took the analysis no further, Strehlow explicitly recognised a conditional reading of –manga for which his example is translated with a German Conditional clause wenn du gehst ‘if you go’.

Following Kempe, Planert (1907) accepted –manga as an aspectual marker occurring with verbs in main clauses and indicating imperfective aspect, as noted above. For example ta tumanga, ‘ich bin schlagend’ ‘I am hitting.’ There is no recognition of a conditional function in Planert’s grammar. Strehlow (1908: 701, footnote 1) challenges the imperfective analysis:
According to Planert-Wettengel on page 558, ta tumanga should mean ‘I am hitting’, however that is not right. It really means – ‘if I hit’ or ‘while I am hitting’. ‘I am hitting’ (which means I hit now) is ta tula nama= ‘I am hitting’.

He follows this with another footnote in which –manga appears in a complex sentence:

(30) Unta lamanga, ta ngana tumitja!
   du wenn gehst, ich dich schlage!
you If go I you hit

‘If you go, I will hit you!’

Although this example was intended to illustrate the use of the Deununtiativus (Aversive) modal form (in the apodosis), it is a clear example of the use of –manga in a dependent clause. The many instances of conditional constructions in Arandic language varieties is clear evidence that it is not a syntactic calque of grammatical structures from another language such as German or English.69

Recent data appear to confirm the accuracy of Strehlow’s Conditional analysis for Western Arrarnta:

(31) Katjiala titjarritjarra waamanga, kwatja kngarrala
    child-ERG willy wagtail hit-PRES CR rain big

nhama
fall-PRES

‘If children throw something at a willy wagtail, it will rain’ (Roennfeldt 2006: 35).

69 See for example Humphris (2017: 98). Compare Stockigt (2016: 421) who claims for Diyari (Dieri), that: ‘It seems probable that the use of –rnanhi in this clause, and in: ‘If you eat, you will die’ (173), was a syntactic feature of ‘mission Diyari’, and did not reflect native speaker usage. This structure is likely to have been developed by the missionaries, who had poor control of the language, as a translational solution for conditional and counterfactual constructions required for developing Diyari liturgical material.’ See also Kneebone (2005: 137).
6.4.2 -tjinanga /-caŋŋaŋa/

I analyse –tjinanga as composed of Future -tjina and CR -nga. Wilkins (1989: 239) labels Mparntwe Arrerrente -tyenhenge as ‘Subsequent’, to describe a subsequent event for which ‘causal or conditional interpretations are common’.\(^7\) T.G.H. Strehlow (1944: 131) labels it as the ‘Future Conditional Mood’. Carl Strehlow describes meanings of –tjinanga which were missed by Kempe who translates -tjinanga as though it only involves imperfective aspect, ‘shall be beating’, ‘I shall being’, ‘I shall be beating’ (1891a: 36).

Following Kempe, Planert (1907: 557) treats it as an aspectual marker (See §5.2.3) with ‘Futurum definitum’ (ie future imperfective) in contrast with -tjina ‘Future indefinitum’ (unmarked for aspect).

Strehlow (1908: 701) labels the suffix ‘Participium und Conditionalis futuri indef’.

Strehlow (1910: 32) recognises temporal and conditional senses, for example Jinga litjinanga ‘If I go’ in contrast with Jinga litjina ‘I will go’. Examples of temporal readings can be seen in his text translations:

\[\text{(32) Etna anma ilku-tjina-ngा, erintja kunna itinja pitji-ka, Sie bald essen werdend, böses Wesen schlechtes nahe kam, 3PL later eat-FUT-CR evil being close come-PC etna tera-la-rira-ka Sie furchtsam gingen 3PL afraid go-PL-PC }\]

‘Als sie gerade essen wollten, kam das böse Wesen heran; sie flohen’

\(^7\) He considers a FUT-ABL analysis but concludes that it is a unitary morpheme. Wilkins (Footnote 21 says that ‘the form -tyenhenge ‘subsequent’ appears to be composed of -tyenhe ‘non-past completive tense and -nge ‘ablative’, but the meaning and the function of the whole is not the simple sum of the parts’.

271
‘When they were about to eat, an evil being came up to them and they fled’

(Strehlow 1907: 69-73)

Strehlow’s analysis of -tjinanga is closer to the current analysis of future tense and CR.

6.5 The analysis of dependent clause markers

As we have seen in the preceding sections, a key grammatical issue in the missionaries’
descriptions is their account of complex sentences, and specifically dependent clause
structures. As I mentioned in the previous sections, on the basis of Kempe’s grammar,
Planert (1907) analyses CR as imperfective aspect, failing to recognise its function as a
dependent clause marker.

By contrast, Strehlow’s analysis of the ‘Participles’ and the way in which he used them in
translation show that he understood that they marked dependent clauses with perception
complement, conditional (irrealis), causal and temporal functions (§6.4.1).

In his translation of Psalm 23 verse 2 (See Appendix 2) Kempe used a verb meaning ‘to
lead’ or ‘to shepherd, herd something’ and marked with -manga to translate German
Present führet ‘leads’. Strehlow replaced Kempe’s tinamanga with the Present tense

\[
(33) \begin{array}{llllllllll}
Aue & Nama & terkaterka & era & jingana & tmainama & kwatja & kumiuna. \\
Pasture & green & 3S & 1.ACC & lead & Wasser & frischen.zum \\
\end{array}
\]

\[
(\text{3S.NOM}) \begin{array}{llllll}
\text{era} & jingana & retjingama \\
\text{mich} & Führet \\
\end{array}
\]

\[
(\text{3.ACC}) \begin{array}{llllll} \\
\text{lead-PRES} \\
\end{array}
\]
‘Er weidet mich auf einer grünen Aue und führet mich zum frischen Wasser’ (Luther 1912).

‘He makes me lie down in green pastures and leads me beside still waters’.

Strehlow’s revisions of Kempe’s translation are evidence that he recognized –nga as marking dependent clauses, and therefore it does not appear in his translation of the German clauses above which are conjoined with ‘und’.

In summary, the central difference between Kempe and Strehlow is that although Kempe glosses CR verbs with ‘while’ and ‘after’, only Strehlow explicitly recognises it as marking a dependent clause and translates it accurately and consistently.

The Neuendettelsau Mission candidates were taught Satzlehre (syntax) using Bauer’s German grammar. Bauer (1859: 114) lists clausal relationships under Einfach über- und untergeordnete Sätze ‘simple main and subordinate clauses’. Along with Bauer’s terms for clause types are also words which are the key markers of each clause type. A number of these key words were also used by Carl Strehlow to translate Aranda clauses. The clausal relationships and key markers used by Strehlow are summarized in Table 8.

Strehlow’s analysis of Aranda was clearly influenced by Bauer’s analysis of German, as he used the same markers as Bauer and some of the same terms.

**Table 8: Functions of the –nga CR marker in Strehlow 1907-20.**

<table>
<thead>
<tr>
<th>Function</th>
<th>German word</th>
<th>German construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception Complement</td>
<td>Dass</td>
<td>Substantive clause</td>
</tr>
<tr>
<td>Causal</td>
<td>Da</td>
<td>Adverbial of grounds</td>
</tr>
<tr>
<td>Temporal state</td>
<td>als, indem</td>
<td>Adverbial of time</td>
</tr>
<tr>
<td>Conditional</td>
<td>Wenn</td>
<td>Possible ground or condition</td>
</tr>
</tbody>
</table>
6.6 Analyses of Clause Relator in other Arandic varieties

This discussion is relevant to current research on Arandic grammar. In this subsection I survey the recent analysis of CR in Mparntwe Arrernte for which the most detailed analysis of the marker is currently available. Other than –tyenhenge (Subsequent), (Wilkins 1989: 239) Wilkins does not explain other verb tenses which occur with CR in Mparntwe Arrernte. In the translation of texts he analyses -menge as a combination of the non-past progressive and the Ablative suffix with a Causal interpretation:

(34) Twemele ayenge arrantherre arlkwetyeke ayenge kele arrekantherrenhe
    Kill-npp-SS 1sgO 2PlA eat-PURP 1sgS OK 2PlPOSS

kere artewe anteme-rle ne-me-ngne
game bush turkey now-FOC/REL be-npp-ABL.

‘Kill me to eat me, for now I am your bush turkey’. (Wilkins 1989: 518 clause 54 and 55).

Wilkins (1989: 462) analyses –rlenge as a monomorphemic Different Subject marker in Mparntwe Arrernte, which indicates that the subject does not share identity with the subject of the higher clause (Wilkins 1989: 229). However –rlenge can occur in the dependent (first) clause with the same Subject as in the main (second) clause with a temporal interpretation:

---

71 One of the very few texts for comparing the roles of –rlenge and –menge is a translation of a story into Western and Eastern varieties: Kwerrkwerrke: The Story of the Mopoke Owl (Williams 1990).
72 Wilkins claims that ‘diachronically the switch-reference marker on non-negative verbs, -rlenge is also based upon the Ablative’. The –rlenge suffix is clearly related to –rle ‘Generic’ and although the following analysis is not suggested by Wilkins, –rlenge could be analysed as –rle ‘Generic’ and the –nge clause relator marker. As –rle indicates an event that is happening simultaneously with the event of the finite verb it is well suited to express relative time.
‘When I get big, perhaps I will teach my children’ (p.c. Margaret Smith 2017).

In this reading, –rlenge refers to the same individual but in a distinct role in the situation, in this case presumably, distinct life stages. If this analysis is valid, the interpretation of the related –rlenge suffix cannot be restricted to a ‘Different Subject’ reading. Further examples are required to gain a better understanding of CR which requires a lot more analysis.

The functions of clause relator markers for WA and ECA varieties are compared in the following table:

**TABLE 9: Clause relator markers for Arandic varieties**

<table>
<thead>
<tr>
<th>Function</th>
<th>Western Arrarnta</th>
<th>Eastern and Central Arrernte</th>
<th>Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception Complement</td>
<td>-ma-nga</td>
<td>-rle-nge</td>
<td>§6.4.1.1</td>
</tr>
<tr>
<td>Causal</td>
<td>-ma-nga</td>
<td>-me-nge</td>
<td>§6.4.1.2</td>
</tr>
<tr>
<td>Temporal state</td>
<td>-ma-nga</td>
<td>-rle-nge</td>
<td>§6.4.1.3</td>
</tr>
<tr>
<td>Conditional</td>
<td>-ma-nga</td>
<td>-me-nge</td>
<td>§6.4.1.4</td>
</tr>
<tr>
<td>Resulting State</td>
<td>-ma-la-nga</td>
<td>-me-arle-nge</td>
<td>§7.2.2</td>
</tr>
</tbody>
</table>
7 RESULTING STATE

Resulting State RS -ala (/əɭə/) indicates a resulting state which exists at the reference time of a clause, which could be the time of utterance as seen in (36) or the time of a higher clause as seen in (37). RS attaches to tensed verb bases such as with PC -ka, PRES -ma and FUT -tjina, marking dependent clauses which denote states, that is, states which continue to be relevant at the reference time:

(36) Ilwe-ke-arle
die-PC-RS

‘one that has died’

(37) Relhaka ingka impatja tjaiya-la lha-ka-la
Person-POSS track road-LOC go-PC-RS

‘There is a footprint on the path where someone went along’

In complex sentences Resulting State indicates that a state continues to the reference time of the matrix clause, but is distinct from it. Elements with such reference and relevance are often labelled as the ‘Perfect’. Comrie (1976: 52) expresses this as ‘the continuing present relevance of a past situation’. For a dependent clause, this interpretation is consistent with functions of ECA –arle (Henderson and Dobson 1994: 202), for example, ‘indicates that the whole event being described in a clause is being treated as a single thing’ and as a clausal complement of a communication predicate ‘indicates a clause that says something extra about a particular person or thing’. The following sections examine how /əɭə/ occurs in combination with tense and CR suffixes. There is limited data for
these forms for WA so I will also refer to data from ECA, assuming that these suffixes function similarly in the WA and ECA varieties.

7.1 –kala /-kaɭə/

I analyse –kala /k-aɭə/ as PC and Resulting State which occurs as a main clause and dependent clause inflection and which is distinct from PC-SS /-kə-ɭə/ in which the event of the dependent clause precedes that of the main clause. The event described by the verb of the dependent clause is retrospective, preceding the event of the main clause but having relevance at the time of the main clause. In combination with CR, it has a similar range of meanings to other CR combinations. As mentioned in §5.2.2 Kempe did not clearly distinguish the Simple Past -ka from -kala. Strehlow (1908: 700) labels –kala as ‘Perfectum’:

(38) Er raka ara kameralanakala.
    he saw kangaroo had got up

(er) fand, dass sich das Känguruh erhoben hatte (Strehlow 1907: 33).

‘(he) saw that the Kangaroo had got up’

The event of the kangaroo standing up is earlier in time than the event of the main clause ‘the man seeing’, This combination may have a ‘relative clause’ interpretation: ‘he saw the kangaroo that had gotten up’ although this interpretation requires further research. The translation of expressions with Resulting State is a clear indication of how Strehlow handles the translations better than Kempe.

73 This gives a ‘Pluperfect’ or ‘past in the past’ reading.
7.2 RESULTING STATE-CR analysis /-aɾəŋə/

Resulting State combines with the Clause Relator to indicate states of dependent clauses with a ‘Perfect’ reading, in which a state marked by a dependent clause occurs prior to that of the main clause, the effects of which are felt at the reference time of the main clause with temporal, conditional and causal readings. In Eastern/Central Arrernte, the suffix corresponding to CR, -nge, has an alternative form +a(r)lenge (Henderson and Dobson 1994: 82). I identify the ECA –karlenge and -marlenge markers with tense markers –ke and –me respectively. A difference can be seen between CR immediately following tense, e.g. –ma-nga PRES-CR, and CR after Resulting State and tense, e.g. –mala-nga PRES-RS-CR, as the -arle-CR indicates a persisting state. Further investigations of -tyenharlenge as FUT+arle-nge need to be made.

(39)

knuljala arana arangana tuta rakalanga etna erinatara lunariraka

Die Hunde rote k graue k. auch gesehen habend sie die beiden verfolgten

Dogs red k. grey k. also having seen they the two pursued

Als die Hunde das rote und das graue Känguru erblickt haben, verfolgten sie die beide.

‘When the dogs saw the red and the grey kangaroo, they pursued them both’.

(Strehlow 1907: 37, free translation page 40).

---

74 Wilkins 1989 lacks an explanation of the distinction between Clause Relator –nge with and without the Subordinate marker –arle to explain the difference between –marlenge and –menge for example

75 This may account for the –kala ‘Perfect’ analysis in earlier grammars.
7.2.1  -kalanga /-kaləŋə/

I analyse -kalanga /-kaləŋə/ as PC /kə/ with RS State –arle and CR /əŋə/. The event of the clause containing the -kalanga verb occurs prior to that of the main clause and the resulting state is relevant to the event of the main clause. Recent works in Western Arrarnta follow Strehlow’s dependent clause analysis with a conditional reading, for example Pfitzner and Schmaal (1990: 51). Oberscheidt (1990: x) refers to it as the ‘past conditional’ which is in agreement with Carl Strehlow’s analysis.

Kempe and Planert do not identify this suffix in their grammars although it occurs in Kempe’s translations. Strehlow (1908: 701) labels -kalanga as the Perfect Participle and Conditional marker. In (40) he uses the German Perfect Participle Gebissen habend to translate utnakalanga with a causal reading:

(40)

<table>
<thead>
<tr>
<th>Arala</th>
<th>albmelaka</th>
<th>unta</th>
<th>aranga</th>
<th>kunna</th>
<th>nakala</th>
<th>knuljala</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotes k</td>
<td>sprach:</td>
<td>du</td>
<td>graues k</td>
<td>schlecht</td>
<td>warst,</td>
<td>die Hunde</td>
</tr>
<tr>
<td>red k.</td>
<td>Said</td>
<td>you</td>
<td>grey k.</td>
<td>bad</td>
<td>Were</td>
<td>dog</td>
</tr>
</tbody>
</table>

ngana utnakalanga
dich gebissen habend
You have bitten

‘Das rote Känguruh sprach- Du bist eine dummes Känguruh, daß du dich von den Hunden zerreissen lässt.’

‘The red kangaroo spoke, you are a stupid kangaroo, because (you let) the dogs attack you’ (Strehlow 1907: 38).
Note that the German Subordinate conjunction *daß* translates a dependent clause in the free translation.

7.2.2  *–malanga /-malanŋa/*

As noted, Kempe’s and Strehlow’s *-malanga* suffix is analysed here as PRES-RS-CR. The event of the dependent clause commences immediately prior to the event of the main verb, and a resulting state continues to the reference time. The same analysis is proposed for the ECA distinction between *-marlenge* and *-menge* (Henderson and Dobson 1994: 474). So, rather than Wilkins’ gloss in (41), I analyse the dependent clause verb as *kwarne-me-arle-nge* ‘hurt-PRES-RS-CR’; the hurting is an ongoing state of affairs that occurs through to the sitting event described by the verb of the higher clause. In this case, there is a causal reading.

(41)  *Urreke nwerne neye-kemparraye, ingke ayenge*

           later 1Pl     sit-PERM-FIRST-EMPH   foot 1SgNom

   *kwarmemerlenge  utyne.*
   *hurt-npp-DS    a sore*

“Hey could we please have a rest soon, my foot is killing me”.

(Wilkins 1989: 499, Untitled account of a bush trip, clause 12).

Kempe (1891a: 23) describes *-malanga* as a conditional and glosses his example *tumalanga* (or *tumaranga*) as ‘I should have beaten’. Strehlow (1908) does not list – *malanga*, but in his unpublished 1910 work, like Kempe, he indicates a conditional meaning in glossing his example *lamalanga* as ‘Wenn ich gehen sollte’ [‘if (I) should

---

76 I assume here that the vowel difference between Wilkins’ –*merlenge* and my –*marlenge* here is not distinctive.
go’]. Conditional is a possible reading of PRES-RS-CR, but would be an insufficient account of its underlying meaning. Again, Strehlow’s gloss of his example also indicates that he recognises –malanga specifically as a type of subordinate clause marker, where Kempe’s gloss does not.

In one translation example, Strehlow may be indicating an understanding of –malanga that is broader than conditional, and therefore closer to its analysis as PRES-RS-CR. The example appears in Strehlow’s hymnbook revision, in his translation of the Second Commandment (Exodus 20: 7): ‘The Lord will punish anyone who misuses his name’. Strehlow uses a subordinate clause with –malanga to translate what is expressed with a relative clause in many English and German versions of Exodus 20: 7. The event of the –malanga clause (i.e. misusing the name) gives rise to a state immediately prior to, and continuing to, the event of the main clause (i.e. punishing).

(42)  

Altjirala lenana raratala tutjina retna ekura  
God-ERG that-ACC anger-with punish-FUT name 3S.DAT

balkala ankamalanga  
incorrectly say-PRES-RS-CR

As an aside, Kempe’s (1891b:2) translation of the same verse uses –mala, his Perfect Participle. This would suggest that he possibly understood the clause as a participial subordinate clause, perhaps roughly corresponding to ‘(anyone) having misused his name.’ His Perfect Participle –mala can often be analysed as PRES-SS, but that is not a

---

77 This assumes that his translation is not intended to parallel those alternative English versions of this verse which use a conditional clause. ‘if (they) misuse his name.’ This alternative would be consistent with Strehlow’s expressed understanding of –malanga as a conditional, and not evidence of a broader understanding.
possible analysis here as it is clear that the dependent and main clauses do not notionally share the same subject. As noted above, Kempe failed to recognise this same subject constraint. In the current analysis, the Aranda translation of the dependent clause is grammatical if his –mala is analysed as /–m-a[ə/ PRES-RS, with its reading equivalent to a relative clause, ie ‘one who (speaks his name wrongly)’. This matches at least the English version of the source text above.

8 Conclusion
Language data from a broad range of Strehlow’s corpus has been examined in order to compare his works with those of Kempe and Planert. The description of Aranda proceeded gradually with the first investigators using labels from grammatical categories taken from the classical languages and German. The traditional grammars utilise paradigms which usually give a single word category label such as ‘Conditional’ without detailed description. This reflects the classical Greco-Roman tradition with ‘relative lack of morphological analysis’ and the ‘relative autonomy of the word’ (Kilbury 1976: 6).

Superficially, Strehlow’s earlier work appears to be no more detailed than Kempe’s, in terms of the coverage of a similar range of grammatical categories. Indeed Kempe, Planert and Strehlow use the same labels for some categories, for example ‘Participle’ and ‘Perfect’. Strehlow’s first manuscript appears to follow Kempe on many points. While Kempe often made insightful observations about the functions of particular suffixes, this did not transfer to his description, which makes his work easy to misinterpret. He listed a large number of grammatical categories but does not provide a clear analysis of them. Kempe compares Aranda to English grammatical categories and this is particularly evident with the participles which are analysed as though their primary function is to indicate imperfective aspect. Planert replicated some of these limitations in his 1907 Aranda grammar.
From consideration of all of the data, it is clear that Strehlow took his later grammatical analysis further than that of his Hermannsburg predecessor. He did not naively apply category labels but was inductive and careful in his description. His grammars show that he was not forcing an analysis on the language but re-analysed grammatical categories and translated them more accurately. In his translations and later analyses (Strehlow 1908-10) he developed more adequate ways of translating the Clause Relator (Participle) and Same Subject marked verbs. Strehlow better understands Resulting States ('Perfect’ in his grammars) than his predecessor.

I agree with van Gent (2001: 460) that

Mit Carl Strehlows Ankunft begann in der Geschichte der Ethnologie Zentralaustraliens eine neue Phase.

‘Carl Strehlow’s arrival marked the beginning of a new phase in the history of Central Australian Ethnology.’

Strehlow’s corpus of Aranda texts, more detailed dictionary and greater body of translations into Aranda amounts to a far greater collection than that of his predecessors. He lived at Hermannsburg for a longer time than them and was able to build upon their pioneering work. Prior to 1908 in his first grammatical analysis, Strehlow followed Kempe’s 1891 grammar. But the revision of Kempe’s hymnbook in 1904 alerted him to deficiencies in Kempe’s grammar. His efforts in this area reflected his need to translate complex sentence structures from European languages and the interlinearised Aboriginal myths, legends and tales for *Die Aranda* (1907-1920). Strehlow’s greater grammatical competence enabled him to undertake large translation projects of *Die Aranda* and the New Testament. Carl Strehlow’s final grammatical analysis was not published but appears to have been adopted by his son T.G.H. Strehlow who published *Aranda*
Phonetics and Grammar in 1944. The Bible translators of the Finke River Mission have used similar analyses of grammatical categories.

A further question is for another paper, that of whether education and specifically language education of the missionaries made a difference to their grammatical analysis. I argue that it is likely that his training in grammar at Neuendettelsau enabled Strehlow to translate and analyse the grammar more effectively than his predecessor. On the question of education, I agree with Nowak (2006: 168) in her assertion that ‘The educational background of the missionaries influenced their linguistic work greatly.’ At an early age Strehlow was inspired to study linguistics by his mentor Carl Seidel (J. Strehlow 2011: 1153). He received a more thorough grounding in philology at Neuendettelsau Mission Institute than those who studied at Hermannsburg Mission Institute. Complex clauses are found in the source languages for Bible translation that Carl Strehlow studied and translated at Neuendettelsau, and he demonstrated more sophisticated analysis in this area. He corresponded with scholars and published his work in an international forum and benefited from the appraisals of his grammar by scholars. It is possible that he learned the syntactic analysis of K.F. Becker which was taught to missionary candidates through Bauer’s German textbook (Bauer 1859; Fuchshuber-Weiβ 2013) but this is a question for further research.

This paper has raised the issue of the value of historical sources to the current analysis of the Arandic languages of Central Australia. The value of the earlier grammars is the detailed information that they provide about the languages and about the growth and development of the language sciences in Australia.
APPENDIX 1:

A selection from Carl Strehlow’s 1910 Grammatik (my translations)

<table>
<thead>
<tr>
<th>Aranda</th>
<th>English</th>
<th>Loritja</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ta tula nama</td>
<td>I’m occupied beating him</td>
<td>Ngaiulu punkaniñi</td>
</tr>
<tr>
<td>Ta tulamala</td>
<td>After he hit, he goes on</td>
<td>Ngaiulu punkukatiñi</td>
</tr>
<tr>
<td>Ta tulatulalama</td>
<td>To repeatedly beat and leave him</td>
<td>Ng. punkupunkukatini</td>
</tr>
<tr>
<td>Ta tulauma</td>
<td>Once hit, then stop beating once</td>
<td>Punktulatsulkañi</td>
</tr>
<tr>
<td>(zus. V. tuma and imbuma)</td>
<td></td>
<td>Jenkuwiapulana</td>
</tr>
<tr>
<td>Ilinakara turulauma</td>
<td>We beat each other only once</td>
<td>Ngaliyku punkulatalkanikutara</td>
</tr>
<tr>
<td>Nuntkara turulerilauma</td>
<td>Pl.</td>
<td>Ngananaku punkulatalkalkañi</td>
</tr>
<tr>
<td>Nukara tulaunja gunja</td>
<td>(negative form)</td>
<td>Ngaiulunku punkulutalkamununa</td>
</tr>
</tbody>
</table>

Ilinkara turulaunja gunja

Nunakara turulerilaunja gunja

<table>
<thead>
<tr>
<th>Tulalbuma</th>
<th>After he hit it returns back</th>
<th>Ngaiulu punkaniñi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tulijinama</td>
<td>First, beat him and then send him</td>
<td>Punkulajenni</td>
</tr>
<tr>
<td>Tulabuma</td>
<td>Everywhere wander and all beat,</td>
<td>Punkulariñi</td>
</tr>
<tr>
<td>tulinjiknamu</td>
<td>Always from place to various sites</td>
<td>Punkulangariñi</td>
</tr>
<tr>
<td></td>
<td>to kill some (or kill something).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Go out and kill people there or also</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cut wood.</td>
<td></td>
</tr>
<tr>
<td>Tutjikalama</td>
<td>beat from top to bottom</td>
<td>punkulutakalingañi</td>
</tr>
<tr>
<td>Tutjintjima</td>
<td>Beat from bottom to top</td>
<td></td>
</tr>
<tr>
<td>ilkutjikalamu</td>
<td>eat first and then lie down, lie</td>
<td>ngalkulaokalingañi</td>
</tr>
<tr>
<td></td>
<td>down after dinner (kalama)</td>
<td></td>
</tr>
<tr>
<td>ilkutjintjima</td>
<td>getting up after having a meal</td>
<td>ngalkulakalbani</td>
</tr>
<tr>
<td>Ta tutjikamanitjikana</td>
<td>I don’t dare to hit the other</td>
<td>punkuntakumununa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuna tutjika manariritjikana (pl.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tutjikerama</td>
<td>He wants the… (?) hitting</td>
<td>punkuntakuringañi</td>
</tr>
<tr>
<td></td>
<td>(antjanama tutjika)</td>
<td></td>
</tr>
<tr>
<td>tutjilbitnima</td>
<td>To come by itself to a…. (?) to hit</td>
<td>Pungunitalkala</td>
</tr>
<tr>
<td></td>
<td>(not called)</td>
<td>Talkalapungañi</td>
</tr>
<tr>
<td></td>
<td>Arpa pitjina tutjika</td>
<td></td>
</tr>
<tr>
<td>Tutjalbuma</td>
<td>After returning to his camp, to</td>
<td>Punganikuñalbara</td>
</tr>
<tr>
<td></td>
<td>hit.</td>
<td></td>
</tr>
<tr>
<td>Tutjugunjala</td>
<td>Without killing it, returning or</td>
<td></td>
</tr>
<tr>
<td>(bring back)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unta inkaia tutjungunjala ngetjalbai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuntu talku punkuwianka ngalakulbaiirai!</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2: Sample Translation

Psalm 23

Luther Bible

Ein Psalm Davids

1. Der Herr is mein Hirte, mir wird nichts mangeln
2. Er weidet mich auf einer grünen Aue und führet mich zum frischen Wasser.
3. Er erquicket meine Seele, er führet mich auf rechter Strasse um seines Namens willen.

Authorized Version English

1. The Lord is my shepherd, I shall not want.
2. He maketh me to lie down in green pastures: he leadeth me beside the still waters.
3. He restoreth my soul: he leadeth me in the paths of righteousness for his name’s sake.
4. Yea, though I walk through the valley of the shadow of death, I will fear no evil: for thou art with me: thy rod and thy staff they comfort me.
5. Thou preparest a table before me in the presence of mine enemies: thou anointest my head with oil; my cup runneth over.
6. Surely goodness and mercy shall follow me all the days of my life: and I will dwell in the house of the LORD for ever.

Kempe 1891b, Page 49

1. Altjira tnairinja nuka namanga, jinga kuta nalka nitjina
2. Nama dirkadirkuna era nuka tainamanga, kwatja kumiuna era nuka raitingama
3. Guruna nuka era ngulilama, era nuka raitingama tjaia aratjala aregnaka ekureka
4. Tupala erilknalunjaka jinga lamanga atanja, imambulanga jinga etalinga teriritjikana, unta jingalela namalanga, tnamala unkwanga nuka inkainamalanga
5. Unta ntutamea urgarbuma leltja nukanga ulara. Unta kaputa nuka anderagata banama, unta nuka lulbalulba talama.

Strehlow 1904, page 232

Psalma Dawidaka

1. Inkata tnainarinja nuka nama, jinga kuta natoa nitjina
2. Nama terkaterkauna era jingana tnainama; kwatja kumiuna era jingana retjingama.
3. Gurunga nukana era ngulilama; era jingana retjingama tjaia aratjala retna ekuranakaguia
4. Tuatjala erilknalunjaka jinga lamanga atanja, imambulanga jinga treritjikana, unta nukalela namanga; tnama unkwangala jingana tjortjikama.
5. Unta tebela urkabuma leltja nukirberanga ulara. Unta kaputa nukana anderalela banana, unta nuka lulbalulba talama.
## Glossary of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Agent</td>
</tr>
<tr>
<td>ABL</td>
<td>Ablative</td>
</tr>
<tr>
<td>ACC</td>
<td>Accusative</td>
</tr>
<tr>
<td>ALL</td>
<td>Allative</td>
</tr>
<tr>
<td>APP</td>
<td>Apprehensive</td>
</tr>
<tr>
<td>AVER</td>
<td>Aversive</td>
</tr>
<tr>
<td>CONT</td>
<td>Continuous</td>
</tr>
<tr>
<td>CAUS</td>
<td>Causative</td>
</tr>
<tr>
<td>CR</td>
<td>Clause Relator</td>
</tr>
<tr>
<td>DAT</td>
<td>Dative</td>
</tr>
<tr>
<td>DS</td>
<td>Different Subject</td>
</tr>
<tr>
<td>ECA</td>
<td>Eastern and Central Arrernte</td>
</tr>
<tr>
<td>EMPH</td>
<td>Emphasis</td>
</tr>
<tr>
<td>ERG</td>
<td>Ergative</td>
</tr>
<tr>
<td>FIRST</td>
<td>Occurs first in sequence of events</td>
</tr>
<tr>
<td>FOC/REL</td>
<td>Focus or Relative marker</td>
</tr>
<tr>
<td>FUT</td>
<td>Future</td>
</tr>
<tr>
<td>GEN</td>
<td>Generic</td>
</tr>
<tr>
<td>HAB</td>
<td>Habitual</td>
</tr>
<tr>
<td>IMP</td>
<td>Imperative</td>
</tr>
<tr>
<td>INCH</td>
<td>Inchoative</td>
</tr>
<tr>
<td>INSTR</td>
<td>Instrumental</td>
</tr>
<tr>
<td>IV</td>
<td>Intransitive Verbaliser</td>
</tr>
<tr>
<td>MpA</td>
<td>Mparntwe (Central) Arrernte</td>
</tr>
<tr>
<td>NEG</td>
<td>Negation</td>
</tr>
<tr>
<td>NOM</td>
<td>Nominative Case</td>
</tr>
<tr>
<td>Npp</td>
<td>Non-past progressive</td>
</tr>
<tr>
<td>O</td>
<td>Grammatical Object</td>
</tr>
<tr>
<td>PC</td>
<td>Past Completive</td>
</tr>
<tr>
<td>PERM</td>
<td>Permissive</td>
</tr>
<tr>
<td>PI</td>
<td>Plural</td>
</tr>
<tr>
<td>POSS</td>
<td>Possessive</td>
</tr>
<tr>
<td>PRES</td>
<td>Present</td>
</tr>
<tr>
<td>PURP</td>
<td>Purposive</td>
</tr>
<tr>
<td>REL</td>
<td>Relative Clause</td>
</tr>
<tr>
<td>RS</td>
<td>Resulting State</td>
</tr>
<tr>
<td>S</td>
<td>Singular</td>
</tr>
<tr>
<td>SS</td>
<td>Same Subject</td>
</tr>
<tr>
<td>WA</td>
<td>Western Arrernta</td>
</tr>
</tbody>
</table>
References


Kempe, H.


Legends living in narratives:
Texts in the documentation of Central Australian languages
1890-1910

1) Introduction
Texts were a central component of the linguistic research of Central Australian
missionaries, originating with the tradition of humanist philology, which was applied to
numerous unwritten languages by the early twentieth century. In this essay, I examine
texts that were recorded by Central Australian Lutheran missionary Carl Strehlow (1871-
1922), arguing that the texts are valuable early records of the Central Australian
languages. Strehlow first published textual material in *Globus*, a German geographical
journal. His major work *Die Aranda-und Loritja-stämme in Zentral-Australien* was
published in seven installments between 1907 and 1920. The first volumes of the work
are narrative texts and translations. Parts I and II of *Die Aranda* comprise 68 narrative
texts from Aranda speakers (The language name is now written ‘Arrarnta’ or ‘Arrernte’) narrative texts. In addition there are 44 texts from Luritja speakers including four tales. Of
the more than one hundred texts recorded by Carl Strehlow, this paper will focus upon the
six interlinear texts that were published in *Die Aranda* in the original languages by his
editor Moritz von Leonhardi.

In the first part of this essay, I analyse the *Die Aranda* texts in terms of their classification
as discourse, observing Strehlow’s tripartite classification of the texts into Mythen

---

79 Strehlow, Carl. *Die Aranda-und Loritja-Stämme in Zentral-Australien*. Frankfurt am Main, Joseph Baer
(Myths) Legends (Sagen) and tales (Märchen). I evaluate the degree to which that
classification can be justified in structural and functional terms.

I assess the degree to which the Die Aranda texts represent authentic Aranda discourse,
highlighting features of the texts which reflect the way in which they were recorded. For
comparison I will also refer to more recent text collections in Eastern Central Arrernte by
Wilkins\textsuperscript{80} and Henderson\textsuperscript{81}, and the collections of Eastern and Central Arrernte and
Western Arrarnta texts in the Living Archive of Aboriginal Languages (LAAL).\textsuperscript{82} In the
literature there is limited discussion of the properties of the texts but some discussion of
the verb tenses that occur within the texts.\textsuperscript{83} The first three texts are narratives and the
final three texts in Wilkins are traditional narratives, which can be compared with the
texts in the Die Aranda collection.

Finally, I explore texts as an integral part of a humanist philology, which emerged from
the German philosophy of language. I conclude that the texts are valuable for future
linguistic research. However, understanding their purpose and the way in which they were
recorded is necessary to their interpretation.

2) Classification of texts

Kenny raises the issue of how the Die Aranda texts are to be classified.\textsuperscript{84} In a footnote she
gives examples of Aboriginal English names of some stories e.g. ‘bush tucker stories’.

\textsuperscript{80} David P. Wilkins, David Mparntwe Arrernte (Aranda) Studies in the structure and semantics of
\textsuperscript{81} Henderson, John (ed.) Arrente Ayeye: Arrente Stories. Alice Springs, Institute for Aboriginal Development and
\textsuperscript{82} Wilkins, p. 488. Texts 7, 8, 9, 10, 11 and 12 in the Wilkins’ grammar are narratives.
\textsuperscript{83} Wilkins, pp. 227-228.
\textsuperscript{84} Anna Kenny The Aranda’s Pepa: An introduction to Carl Strehlow’s Masterpiece Die Aranda-und Loritja-Stämme in
Genres are variable in different languages and this requires consideration about how they are labelled and described. They can be distinguished by their structure (form) and function, as the ‘codification of discursive properties’. In classifying the texts, it is important to know what structural and functional properties are relevant for Aranda texts. The Die Aranda texts follow some conventions of narratives which are also found in other languages of the world and could be described as ‘prose narratives’, to distinguish them from poetry and other genres. Narratives begin with an orienter statement followed by a sequence of clauses in which the verbs are in the past tense. They recount the experience verbally in the same order as the original events ‘which (it is inferred), actually occurred’.

3) Narratives as myth, legend and tale

Further subcategorization of the narratives requires a basis for classification. There appears to be broad agreement among folklorists and anthropologists about the division of narratives into sub-genre. A common division is ‘myths’, ‘legends’ and ‘tales’ which Bascom finds to be ‘analytically useful’. Strehlow uses this classification in Die Aranda as outlined in Table 1 which shows the number of texts of each genre. However in many societies myth and legend narratives are not distinguished and the Aranda and Loritja

---

86 Prose narrative is an appropriate term for the widespread and important category of verbal art which includes myths. William Bascom, The Forms of Folklore: Prose Narratives, in The Journal of American Folklore, Vol. 78, No. 307 (Jan. - Mar., 1965), pp. 3-20, p. 3
88 Labov and Waletzky.
90 Bascom, p. 17.
languages do not have words distinguishing these. One issue is whether, in Bascom’s terms ‘native’ or ‘analytic’ labels are applied.\textsuperscript{91} A ‘native’ label is one that is derived from a term which exists in the language which is being analysed. An ‘analytic’ label is a term applied by the linguist. It may be useful to divide the texts on functional and semantic grounds in terms of the purpose of the text in the narrator’s culture.\textsuperscript{92}

Table 1: Texts in \textit{Die Aranda}

<table>
<thead>
<tr>
<th>Texts</th>
<th>Myth</th>
<th>Legend</th>
<th>Tale</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aranda</td>
<td>6</td>
<td>64</td>
<td>4</td>
<td>73</td>
</tr>
<tr>
<td>Loritja</td>
<td>4</td>
<td>42</td>
<td>2</td>
<td>44</td>
</tr>
</tbody>
</table>

Les Hiatt shows that myths have been understood by different schools according to their functions as history, charter, dream and ontology.\textsuperscript{93} He claimed that ‘with the notable exception of Ronald and Catherine Berndt, writers on Aboriginal mythology have not paid much attention to problems of definition and have often used terms such as myth, legend and tale interchangeably and without specification’.\textsuperscript{94} In \textit{The World of the First Australians}, the Berndts adopted a system of classification by ‘dividing stories into sacred and ordinary and discussing them respectively under the headings of mythology and oral literature (non-sacred stories)’.\textsuperscript{95} They made a distinction in the Ordinary stories between those which were handed down by tradition, and those stories which were based upon contemporary experiences (including dreams). The Berndts’ position was that of ‘myth as charter’, that myth is a conservative socialising force, whose function was to ‘sanctify

\textsuperscript{91} Bascom 1965, p.5
\textsuperscript{92} Bascom, p. 10.
\textsuperscript{93} L. R. Hiatt (ed.) \textit{Australian Aboriginal Mythology}. AIAS, Canberra, 1975.
\textsuperscript{94} Hiatt, p. 1.
existing institutions and to foster the values of sociality.'  

They take a functionalist approach, stating that: ‘ritual is an acting out of events or instructions incorporated in myth and mythology substantiates or justifies a whole range of rituals’. Although there is some flexibility required in this definition, there appears to be value in their system.

4) Analysis: Properties of the *Die Aranda* as narratives

Six of the *Die Aranda* texts have an interlinear gloss (words which are direct translations from the target language appear underneath words from the source language) and a free translation. Table 2 shows the number of Aranda and German words in each of the *Die Aranda* texts, for both the interlinear text (I.T.) and free translations (F.T.):

<table>
<thead>
<tr>
<th>Text</th>
<th>Name</th>
<th>Aranda words</th>
<th>German I.T.</th>
<th>German F.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text 6</td>
<td>The Two Poison Gland Men</td>
<td>389</td>
<td>485</td>
<td>569</td>
</tr>
<tr>
<td>Text 14</td>
<td>Divine Kangaroo</td>
<td>557</td>
<td>698</td>
<td>896</td>
</tr>
<tr>
<td>Text 15</td>
<td>Red and Grey kangaroo</td>
<td>331</td>
<td>449</td>
<td>521</td>
</tr>
<tr>
<td>Text 36</td>
<td>The Rakara Men</td>
<td>471</td>
<td>560</td>
<td>660</td>
</tr>
<tr>
<td>Text 52</td>
<td>The Many Rukuta</td>
<td>159</td>
<td>209</td>
<td>246</td>
</tr>
<tr>
<td>Bk 2, Text 8</td>
<td>Dog Story</td>
<td>303</td>
<td>393</td>
<td>430</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6</td>
<td>2210</td>
<td>2794</td>
<td>3322</td>
</tr>
</tbody>
</table>

Table 2 compares the numbers of words in each text and the number of Aranda words compared with the number of words in the German interlinear text and the German free translation. The differences between the number of Aranda words and the German interlinear translation can be accounted for by the fact that some Aranda words are

---

96 Hiatt, p. 5.

translated with multiple German words. This comparison highlights the fact that the translation process was not a straightforward transference of translation equivalents from Aranda to German.

a. Time orientation

The *Die Aranda* texts have a brief ‘Setting’, an orieniter statement which locates events in time and place. For example, the Arrernte narratives on the Living Archive (LAAL) site often begin with *arlte anyentele* ‘one day’. *Arrurle anthurre* ‘a long time ago’ appears in one of the Arrernte texts (Pintaherreaherre) on the LAAL site. Myths concern ancient times when the earth was in a different form to what it is now. Hiatt explains, ‘it seems advisable to use myth broadly to mean a traditional narrative which in part describes things that do not occur’, that is, do not occur in the natural world of the present time. Berndt examines words such as Luritja *djugurba* (*Tjukurrpa*), which is used for the primordial time of Creation, and also for traditional stories which derive from the Tjukurrpa or the Aranda equivalent *Altjira*, a controversial and untranslatable word. He distinguishes *djugurba* texts from other forms of text. Strehlow’s use of the German expression *Vor zeiten* ‘primeval times’ as with the Rain Men text, probably translates *Altjira* and clearly identifies this text as a myth. In *der ältesten Zeit*, ‘in the earliest

---


99 Hiatt, p. 3.


time’ occurs in Text 10.\textsuperscript{104} Text 12 has *Am Anfang* ‘at the beginning’ when emus were blind.\textsuperscript{105} Legends are concerned with events which have occurred in more recent times. Of the 64 Sagen texts, 25 of the texts (40\%) begin with a temporal reference. Further, 18 of the texts (28\%) begin with ‘in earlier times, in the early times, at the beginning’. Clearly Strehlow wants to use the term *Sagen* ‘legend’ here because *Sagen* are about events which are claimed to be historical, for example: “In times long ago the people living inside the earth (*rella ngantja*) knew no fire and had to eat their meat raw.”

In the four *Märchen* in Strehlow (1907) there is an initial statement of indeterminate time, *Es lebten einmal*, ‘Once there was…’ thus confirming Bascom’s view that tales are ‘timeless, placeless’. Märchen 1 and Märchen 4 have *einst* ‘once’, Märchen 2 and 3 have *einmal* ‘sometime, once’. This appears to be a conventional opening formula which indicates that the tale is fiction\textsuperscript{106} which has no equivalent in the myths and legends.

\textbf{b. Factuality}

Bascom claims that myths are regarded as factual by members of those the society in which they are told, and not only as factual, but also as sacred.\textsuperscript{107} This division corresponds to a division in prose narratives in other languages of the world in which legends are regarded as sacred whereas tales are secular.\textsuperscript{108} Leonhardi thought that the tales were a distinct category because their audience was not restricted to initiated men and not told for a religious purpose:

\textsuperscript{104} Strehlow, p. 28.
\textsuperscript{105} Strehlow, p. 30.
\textsuperscript{106} Bascom 1984, p. 11.
\textsuperscript{107} Bascom, p. 9.
\textsuperscript{108} Bascom, p. 11.
The difference between these fables and the previous legends consists in that the latter may be told to only those people who have been accepted by the men as members of their society, and who accept the veracity of these stories. The fables, however, may be told to women and children.\footnote{Carl Strehlow. \textit{The Aranda and Loritja Tribes of Central Australia}, English translation by Hans Oberscheidt, J. Baer & Company, 1907-20, p. 120.}

The movement of ancestors over the landscape and the creation of sites in legends would appear to distinguish them from tales which lack spatial and temporal referents and are usually regarded as fiction.\footnote{Bascom, p. 15.}

c. Geographical orientation

The \textit{Die Aranda Sagen} or legends are located geographically, that is, their location is of critical importance.\footnote{Strehlow 1907, p. 94.} Their purpose is to explain the origin of a particular landform which came into being as a result of the activities of mythological beings. They typically conclude with the transformation of characters into landforms and ceremonial objects, for example, \textit{und wurde in einen Felsen verwandelt} ‘and then became rock’. In the Luritja myths, the mythological ancestors \textit{puliringu} ‘became rock’.\footnote{Strehlow 1908:38) \textit{Strehlow}, p. 4.} Whereas legends mention place names, Bascom notes that place is not important for tales.\footnote{Bascom, p. 9.} The \textit{Märchen} have vague geographical reference, for example, \textit{Im Nordosten}, ‘in the north-east’.\footnote{Strehlow, p. 4.} They also lack the transformation of characters into landforms. Most of the sixty two texts in Klaproth’s Pitjantjakara-Yankunjtjakara corpus are tales of this type.\footnote{Danièle M. Klaproth, \textit{Narrative as Social Practice: Anglo-Western and Australian Aboriginal Oral Traditions}. Berlin, Mouton de Gruyter, 2004, p. 293.} Only in one of
the texts in her corpus is a character transformed into a landform.

Rather than just a naïve application of European categories of genre to the texts, there is some justification to Strehlow’s division of the Die Aranda prose narratives into myths, legends and tales in terms of their functional properties.

5) Recording and translation

To what extent did the texts represent the authentic language of Strehlow’s informants? The question is to what extent the texts represent natural language and the degree to which they were edited. The editing process could change natural spoken ‘multi-modal’ discourse into texts with features that were closer to written literature. A further issue is the question of how the texts were translated. What will be explored in this section is the difficulty of recording the texts and the differences between spoken and written language, when the myths were transcribed to paper and later edited and translated. There is a strong classicising focus to the texts. It is apparent that through the processes of dictation, editing and translation that Die Aranda was created as a form of literature for which the content of the texts took priority over the form. In this exploration, I compare the Central Australian texts with those of the Americanist tradition, to see to what extent there may have been similarities in the way that the texts were recorded.

a. Versions

Often the texts were recorded in different versions of what may be described as ‘the text in abstract’. The difference is in the amount of detail between different renditions of the ‘text in abstract’ which accords with Finnegan’s observation that:

by and large the most striking characteristic of oral as opposed to written literature is its variability. There is little concept of the verbal accuracy
typical of cultures which depend on the written, particularly the printed, word.'\textsuperscript{116}

Texts in the Dieri language were collected by the Lutheran missionaries Otto Siebert and Johann Reuther at Lake Killalpannina in South Australia.\textsuperscript{117} Siebert commented that it was very difficult to write down the texts accurately as every recital of a myth was different.

\subsection*{b. Dictation}

The recording of the Die Aranda texts relied upon handwritten dictation or re-telling. As recording equipment was not available in the field, the texts had to be dictated and written on paper, which resulted in short finite clauses as a result of the ‘stops and starts of the dictation process’.\textsuperscript{118} This meant a modification of the texts to be able to handle what the transcriber could manage without recording equipment. Tedlock (1983) discusses how the conditions for telling a myth are often at odds with the conditions for recording spontaneous stories.\textsuperscript{119} The researcher is part of the process and can’t be eliminated. The texts were transformed from oral stories to written texts and distorted by the process of dictation.

\subsection*{c. Translating and Understanding texts}

The texts are classified as ‘narratives’, on the basis of their structural properties and sub-

\textsuperscript{118} Dennis Tedlock. \textit{The spoken word and the work of interpretation}. Philadelphia, University of Pennsylvania Press, 1983
\textsuperscript{119} Tedlock, p. 38
classified according to their functional properties. However, they differ from narratives from Europe. As Myers explains, ‘the social existence of such knowledge is not embodied as an abstract lore, in the form of folktales like those garnered by the Grimm brothers’.\textsuperscript{120} They are attached to the land, which is an essential element in a traditional Aboriginal story.\textsuperscript{121} They are repositories of geographical and environmental knowledge. The narratives concern not only the land but social relationships.\textsuperscript{122} The legends are highly contextual and specific, mentioning site names and characters and linking the mythical character and creation with current places and phenomena. This accords with the view that preliterate or non-literate societies are contextual and that one of the effects of literacy is to decontextualize. The narratives were a challenge to translate. In the opinion of Berndt and Berndt, ‘it is more than translating a story-line. It is more like translating a culture.’\textsuperscript{123} The texts are not immediately understandable outside their contexts, and the large number of footnotes were required to explain many aspects of Aranda and Luritja culture.

Strehlow explained the purpose of the songs:

‘Sie besingen naemlich die Wanderungen und die Taten ihrer Vorfahren, ihrer Totems.’
‘They sing about the wandering and deeds of their ancestors and their totems’\textsuperscript{124}

Preuss claims that the function of the myth is to tell about the places where the ancestors have gone into the ground. The narratives in Die Aranda often finish with, ‘and that is the way that it is’, offering an explanation of how something came into being. Geographical and physical features are explained. For example in the Rukuta story, Rubuntja is said to be a wide and treeless plain because of a severe fire that burned up all of the

\textsuperscript{122} Klapproth, p. 79
\textsuperscript{123} Berndt and Berndt, p. 415.
\textsuperscript{124} Carl Strehlow to N.W. Thomas, mid to end of 1906 (SH-SP-6-1) cited in Kenny 2013, p. 146.
Tedlock discusses the problems with embellishment or distortions where texts are translated in a way which loses grammatical complexity. He claims that Boas doesn’t deal with translation and that the translations are ‘literal’. As the languages and cultures were thought to be incommensurable, the text could not be rendered into literary English. Boas would compile a running guide to the original text, not a true translation into English, ‘written in an English that was decidedly awkward and foreign’. Further, ‘the neglect of translation is undoubtedly related to the belief that style is untranslatable.’

Franz Boas and A.L. Kroeber ‘held that style (or “literary form”) was so bound up with the peculiarities of particular languages that it was unlikely to survive translation and that ‘style is untranslatable.’ The Boasians reacted to the ‘domestication’ of English translations of texts by going to the opposite extreme and producing literal ‘foreignising’ translations to emphasis cultural differences. They favoured the kind of language given to them by their informants, adopting a ‘foreignizing’ approach to translation rather than ‘domesticating’, that is, to show the foreignness of the source text by replicating it in the target text. According to Tedlock this was to get away from those who told the stories in English, the ‘versions’ and ‘retellers’. By contrast, Strehlow’s free translations appear to be attempts to translate the *Die Aranda* texts into literary German.

d. Editing

Certain discourse features of Aranda texts are not apparent in the *Die Aranda* collection and appear to have been edited out. A similar process occurred in North American
narratives in which ‘Boas and his followers, in translating oral narratives, have treated them as though they were equivalent to written prose short stories’.\textsuperscript{130} Although texts were central to their fieldwork\textsuperscript{131}, the Boasians failed to understand elements of style that were specific to oral texts and how they differed from written texts. The edited versions tend to be ‘condensations of what a performer would tell in a normal spontaneous fashion’ according to Tedlock.\textsuperscript{132} There is the editing out of verbal conventions such as ‘you see’, that is, ‘monological currents of writing’.\textsuperscript{133}

The following examples reveal the way in which features of the original narratives were changed when the Die Aranda texts were transformed into literary documents.

i. Tense markers

There are many examples of the +tyarte Past Habitual marker in modern Arrernte texts,\textsuperscript{134} which appear to follow the patterns of speech more closely than the Die Aranda texts in which none occur. The habitual marker describes a state. Rather, the Past Completed maka form of nama ‘to be’ occurs at the beginning of the texts rather than past habitual verbal suffixes. There are few overt markers of temporal progression within the texts. However, gurunga, German: daaruf, ‘thereupon, after that’ is used in a temporal sense in the Globus text:

<table>
<thead>
<tr>
<th>Alknanta</th>
<th>rataka,</th>
<th>Gurunga</th>
<th>nama</th>
<th>inkaraka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flame</td>
<td>came out</td>
<td>From there</td>
<td>grass</td>
<td>all</td>
</tr>
</tbody>
</table>

\textsuperscript{130} Tedlock 1983, p. 45.
\textsuperscript{132} Tedlock 1983, p. 38.
\textsuperscript{133} Tedlock 1983, p. 288.
\textsuperscript{134} Wilkins, p. 507.
mbanaka Era janna ilunaka
Quickly caught He could not extinguish

‘The flame was leaping out and after that the grass caught fire and he couldn’t extinguish it’.

ii. Ellipsis, Repetition and restatement

The *Die Aranda* texts appear to have been edited, as shown by various features of the texts such as the high number of subordinate clauses. T.G.H. Strehlow says that ‘short, asyndetic sentences are much favoured by Aranda story-tellers’.

Ellipsis or the deletion of arguments from clauses is a common feature of speech and transcribed narratives in human languages, but is not evident in the *Die Aranda* texts.

Repetition is a storytelling device and a strong feature of oral text as distinct from written text. Although parallelism is common in texts, repetitions have been regarded as stylistic redundancies and edited out. Tedlock claims that his own recordings are more geared to oral performance. They average twice the length of those of the American anthropologist Ruth Benedict.

Another device is the repetition of part of a clause in a succeeding clause. This is tail-head linkage, a cohesive device in which ‘something mentioned in the last sentence of the preceding paragraph is referred to by means of back-reference in an adverbial clause in the following paragraph.’

Tail-head linkages are typically edited out of written

---

135 Strehlow 1907.


140 Klapproth, pp. 221-35.
texts.\textsuperscript{141}

\section*{iii. Word Order}

The clauses in \textit{Die Aranda} follow the conventional AOV word order for Aranda transitive clauses rather than discourse organisation which involves changes in word order in the clause. Australian languages can depart from the usual preferred word order with ‘no loss of communicative intent or chance of ambiguity’\textsuperscript{142} and this is the way that natural discourse occurs, the lack of this discourse organisation is evidence that the clauses have been elicited as individual sentences rather than as coherent texts.

\section*{iv. Evaluation}

The \textit{Die Aranda} texts don’t use direct speech with a verb of perception (‘see’) as an orienter which occurs numerous times in other traditional narratives; for example in Pitjantjatjara:

\textit{And then he saw “Indeed here his tracks are in the ground”}.\textsuperscript{143}

A particle \textit{akwele} ‘Quotative’ occurs frequently in Arrernte texts,\textsuperscript{144} when the speaker wants to convey that they have learned the story through tradition.\textsuperscript{145} The \textit{Die Aranda} texts lack this particle.\textsuperscript{146} The texts lack ‘evaluation’ statements compared with Pitjantjatjara texts as in the story \textit{Tjitji Maluringanyi} which concludes with ‘yes, that’s

\footnotesize
\begin{itemize}
\item \textsuperscript{142}Dixon, p. 441.
\item \textsuperscript{143}Klapproth, p. 232.
\item \textsuperscript{144}Wilkins, p. 521. Text 12: Ampe Urreye Kweke Artnerrrentye-akerte, told by Margaret Heffernan.
\item \textsuperscript{145}Henderson and Dobson p. 77. \textit{Akwele} is very common in traditional stories.
\item \textsuperscript{146}Klapproth, p. 240. The particle \textit{kunyu} is used in the Pitjantjatjara texts. Strehlow recorded texts in the related Luritja language.
\end{itemize}
These features of editing show that the texts were viewed as literary artefacts which were designed to be read and interpreted apart from their original context where features of oral communication such as repetition, the selection of tense markers and evaluation markers have been removed.

6) The purpose of recording the texts

It is clear from letters and publications that one of Carl Strehlow’s main priorities in compiling Die Aranda was to collect texts as part of an integrated linguistic project where every part of the collection would have a place in understanding and interpretation. The Die Aranda texts were a continuation of the Globus article (Strehlow 1907) and were a fieldwork priority. The audience for the written texts was the scholarly community who wanted to understand the Aranda culture and needed a guide to the Aranda language for example, Lang (1909):

“Take the story of "the divine kangaru," which Mr, Strehlow gives in Arunta, with an interlineal translation. All philologists must thank him for what no other man has given us, several Arunta texts”.

In a letter to N.W. Thomas, Strehlow indicated that he had recorded over 50 myths and 500 songs.148

As von Leonhardi wrote to Mathews,

“We are lacking good texts in the original language with interlinear translation, of course the texts would have to be recorded with the greatest precision. Such texts, though, would be more pertinent at the moment than grammars and vocabularies, which the scholar in the end- if the texts are

147 Klapproth, p. 222.
148 Strehlow to N.W. Thomas, SH-SP-6-1, in the second half of 1906.
only somewhat extensive - could derive from them himself.”

Texts in the original languages – Urtext – were seen as authentic records of what speakers had said, as the written embodiment of myth. Original texts were better than translations.

Leonhardi outlined his requirements to Carl Strehlow:

In addition, I would ask you to certainly record one or the other myth in its original language and place its German meaning above every word. It is the best, if not the only way, to grasp the Geist (spirit) of a language and views, when one is unable to undertake studies on the spot. Even then it is often necessary to provide a correct German Translation.

The distrust of translations resulted from the difficulties of translating from one language to another which were recognised by those with significant experience in translation.

Leonhardi encouraged Strehlow to collect Urtext:

Myths in the Aranda language with interlinear translations would be of great value; and a dictionary and a grammar would provide the key to them. A dictionary outlining the meaning of words as well as short explanations of the meaning of individual objects, characters in the myths etc. is highly valued in science.

As Kenny states,

this is one of the reasons he was ‘intending to write a short grammar and a dictionary of the local language, so that anyone can independently translate the Tj-songs, and see, in how far the older language deviates from the current vernacular’.

Leonhardi explained that ‘my redactional activity has added nothing, absolutely nothing, apart from the scientific names of some of the animals and plants.’

---

151 Leonhardi to Carl Strehlow 9.9.1905.
152 Carl Strehlow to NW Thomas, mid to end of 1906 (SH-SP-6-1), cited in Kenny 2014:152.
153 Leonhardi 1907: 134.
ethnologist Konrad Preuss reviewed *Die Aranda* in two issues of the *Deutsche Literaturzeitung*. In his first review Preuss says that the myths, legends and tales were the first fruit of the collaboration (*Verbindungen*) between Leonhardi and Strehlow, ‘[a]s far as accuracy is concerned they are like translations from the original text.’ Preuss said that five of them also have interlinear texts and these were only from the first installment, the Aranda texts. Preuss thought that Strehlow should record more *Urtext*, raising the question as to why more texts were not interlinearized. Strehlow wrote to von Leonhardi on the 19 September 1906 (SH-SP-3-1) stating that the recording of the texts was very time-consuming and that is the main reason why he didn’t record more interlinear texts.

a. **Texts and grammatical analysis**

Texts have value for understanding the grammar of a language. Chelliah explains the value of texts in linguistic fieldwork. Usually they are naturalistic, and reflect the ways in which language consultants actually speak, avoiding ‘translation effects’, that is, the transfer of the structures of the source language to the target language in a translation. In the assessment of Berndt and Berndt ‘such documents, moreover are of great value linguistically’. In working out a system of categories for the grammatical analysis of any language it is proper to work from ‘texts’, actual pieces of discourse, recorded or transcribed, uttered in genuine contexts of language use. From these classes of words and

---


155 Preuss, p. 1786.


grammatical patterns can be discovered.\(^{158}\) The texts are a window into Strehlow’s approach to syntax and clause connection which is not so readily visible through his grammars which follow a more traditional approach to grammar without example sentences.

b. **Texts in the Humanist tradition**

Texts were collected by German Lutheran missionaries as documentary records of the languages and cultures of peoples, forming a large part of the German tradition with its philological foundations.\(^{159}\) Texts are the main focus of philology, part of a humanist discipline which emerged in the nineteenth century and continued in the work of the philology and the later applications of that philology: missionary linguistics, Humboldtian linguistics and Ethnologie, all of which had a strong orientation to linguistic fieldwork. The priority of texts was retained in humanist philology with its strong emphasis upon classical literature. As Kenny explains ‘Strehlow and von Leonhardi shared an intellectual orientation that affirmed the status of language and literature, or oral text, as the key to a culture’.\(^{160}\) Bauman writes of the legacy of Johann Herder and of Jakob and Wilhelm Grimm:

> Their unified vision of language, culture, literature and history identified the oral traditions of people as authentic expressions of their culture, they encouraged the collecting of folktales and folk poetry as neccessary to the documentary record for philological investigation, and all the more so where there were no written records.\(^{161}\)

One of Herder’s vital contributions to the theory of interpretation is his emphasis upon the essential role played in interpreting a work by a correct identification of its genre, and on

---


\(^{160}\) Kenny, p. 51.

\(^{161}\) Bauman, p. 145
the difficulty of achieving such a correct identification in many cases. Herder conceives of a genre as consisting of a text with a general purpose together with certain rules of composition which serve it, ‘the task of identifying a genre correctly is complicated by the fact that genres often vary in subtle ways across historical periods and cultures, and even between authors working within a single period and culture’. Philology is primarily about collecting texts to understand other societies, growing out of the study of the ancient languages which was progressively applied to modern languages such as German and then to unwritten languages. The oriental and classical traditions were applied to ‘new’ languages or languages without philologies of their own. Philology was applied to oral traditions in a similar manner to which it had been applied to ancient texts. The texts now consisted of spoken languages, which were the goal of the linguist. From ancient societies and languages to contemporary societies, text collections represented the raw data for linguistic analysis. Many researchers who collected texts were interested in language as part of their interest in religion and mythology. Beliefs and feelings could be understood through the philological treatment of native texts. For example, Max Müller translated extensive collections of Sanskrit texts. Müller published the *Sacred Books of the East*, an extensive text collection along with dictionaries and grammars. Anthropology appropriated the textual basis from classical philology in order to analyse contemporary cultures rather than ancient languages. The collection of text was part of rich documentation and clearer understanding of the language.

Anthropological linguistics in the United States of America was founded on the study of

---

163 Forster, p. 291.
texts, which descended from the humanist philology of the early nineteenth century and not the positivist discipline which it became in the late nineteenth century. Boas was inspired by the work of Steinthal (1869). Bunzl comments on Boas’ handling of the text, ‘In the 1911 document, each sketch closed with a few pages of text explicated’. Texts were included at the end of the grammar to show the language in use.

7) Conclusion: The study of texts in Australian linguistics

In his introduction to Aranda Grammar, A.P. Elkin expressed a hope that ‘the texts provided by Pastor C. Strehlow will now become much more significant.’ The long term engagement of missionary linguists in the Aranda language has enabled a rich documentation of the language for a hundred and forty years. The Die Aranda texts have great value for linguists today. With their wealth of detailed recording, the Die Aranda texts go beyond the anthologies of Strehlow’s contemporaries, for example Langloh Parker (1896) in which the texts have been recorded in English. The texts in Die Aranda represent a further stage in the linguistic documentation of Aranda, the earliest collection of Central Australian narratives going beyond the first stage, which concluded with the departure of the Hermannsburg missionaries in 1891. Yet they have been ignored by those who have written about discourse in Central Australia, for example Klapproth doesn’t mention Carl Strehlow’s work. Nor are they mentioned in Wilkins’ grammar of Mparntwe, a related Arrernte variety. English translations of the texts have not been


168 Klapproth 2004

169 Wilkins 1989.
available and the original German versions have been difficult to access. Nevertheless, recent investigations into verbal art in Arandic languages have utilised the Die Aranda texts.\(^{170}\)

The texts require interpretation.\(^{171}\) Collections of texts which were published tended to distort the original language. The Boasian tradition was careful to analyse American languages in terms of categories that were found in the languages themselves, but did not recognise the distinctive characteristics of American oral literature and the loss which occurred when that literature was transferred to print. The same appears to have happened with the Die Aranda texts. The use of language, the recording of language and the associated language ideologies of the German philosophy of language tradition operated alongside a classicist view of literature which placed a high priority on the editing of texts and their presentation as written documents.

Due to the literal interlinear glosses and free translations of a small part of the Die Aranda corpus it is possible to see how Strehlow translates each word and grammatical marker in the text. The texts complement Strehlow’s unpublished Aranda grammars.

There needs to be recognition of the lack of interest in texts in Australian anthropology and the degree to which Australian linguistics of the twentieth century had been influenced by functionalist anthropology and its interest in social systems to the exclusion of language and earlier humanist approaches to the study of languages.\(^{172}\) Texts and oral literature are the area in which the German tradition is most distinguished from British anthropology in which folklore came to be almost entirely ignored in the twentieth


\(^{172}\) Kenny, p. 10 calls Strehlow’s work ‘transitional’.
century. British Social anthropologists turned away from any serious study of the oral literature of non-literate people. In the wider Australian society, Aboriginal myths came to be regarded as ‘simple and childish’. The fate of text and discourse analysis is symptomatic of the overall disregard for language that occurred in British and Australian linguistic and anthropological history.

In the view of Bauman, ‘in British social anthropology, there has been relatively little language-centred interest in texts, with the prominent exception of Bronislaw Malinowski (1884-1942). Bauman further elaborates that ‘his ethnographic theory of meaning grew to significant extent out of his attempts to translate Trobriand magical texts’. A lack of interest in folklore as a reaction to evolutionary anthropology contributed to the rise of the functionalist perspective in anthropology. Participant observation was about ‘being there’. A kind of reductionism of Malinowski and the functionalist school justified myths in terms of stabilising the social structure. Finnegan states that “Malinowski's remarks have been taken up to justify an assumption that the only proper sociological approach to myths was to explain them-or explain them away-in structural-functional terms’. Examples of oral literature were singled out as 'myths' if they could be closely connected with a continuing social structure, a stable and stabilising force-and otherwise ignored.”

Malinowski’s colleagues and successors didn’t show much interest in texts,

Above all, the rigid theoretical framework and dominating influence of Radcliffe-Brown as both writer and teacher turned interest away from oral literature except in so far as it could be seen to fit with his theoretical presuppositions.

---

173 Finnegan, p. 63.
174 Berndt and Berndt, p. 2.
175 Bauman, p. 146.
176 Finnegan, p. 64.
177 Finnegan, p. 64
The elicitation of social structures was regarded as more important than the collection of texts\textsuperscript{178} as researchers were told to concentrate upon kinship structures. This attitude to texts ‘persisted in the academic community’ and for that reason, texts were not actively collected by British or Australian social anthropologists. Readers no longer had access to the textual sources of ethnographic descriptions.\textsuperscript{179} The fate of texts was to be abandoned.

Berndt and Berndt claim that there were very few researchers who have taken myth seriously to the extent of recording myths.\textsuperscript{180} They mention T.G.H. Strehlow’s Aranda studies\textsuperscript{181} and the work of Jeffrey Heath\textsuperscript{182}, assessing the contemporary ‘state of the art’:

\begin{quote}
Whatever the defects of interpretation or rigour in these earlier collections, their authors did realise that these items of verbal art were of importance to the people studied and a significant aspect of the culture as a whole; thus, as a matter of course, they included them as one part, or even the main part, of their accounts of the peoples they wished to describe. It is then at first sight surprising that the present generation of British anthropologists, those who have otherwise followed in the footsteps of both these field investigators and of the earlier mythological speculators, have been content merely to reject their methods and interpretations without, in this case, wishing to improve on them in the same field.
\end{quote}

Yet there are problems with elicitation and questionnaires which have been recognised within linguistics. No linguistic documentation is complete without texts as authentic expressions of what speakers say.

Leonhardi was most interested in understanding Aranda and Loritja cultures through the \textit{Urtext} but the constraints of time kept Strehlow from making more interlinear translations. The discontinuation of the text collection in Central Australia was probably because of Leonhardi’s premature death. After that time, no further work was carried out.

\begin{flushright}
\textsuperscript{178} Hercus and McCaul, p. 36.
\textsuperscript{179} Tedlock 1983.
\textsuperscript{180} Berndt and Berndt, p. 12.
\textsuperscript{181} Strehlow built upon his father Carl Strehlow’s earlier work.
\textsuperscript{182} Jeffrey Heath. \textit{Nunggubuyu myths and ethnographic texts}. Australian Institute of Aboriginal Studies, Canberra, 1980.
\end{flushright}
on the project of data collection for *Die Aranda*. The grammars and dictionary had been designed to accompany the texts and were supposed to be published with them.

Leonhardi’s humanistic approach to understand Aboriginal societies was overtaken by positivism in Germany. The new turn to positivism saw an increasing interest in visual observation and the collection of artefacts for display in museums rather than the collection and interpretation of texts.

In the view of Hercus and McCaul the Lutheran missionaries ‘Siebert and Reuther were a long way ahead of their time’\textsuperscript{183}. Strehlow’s texts provide a rich understanding of the language. The strength of the Neuendettelsau missionaries and their training in translation was that, despite the limitations of Strehlow’s recording techniques, the texts are accurately translated records of Aranda a century after they were published.

\textsuperscript{183} Hercus and McCaul, p. 36.
Phonetics and orthography

Preface

Missionary linguists were prominently involved in the development of writing systems in Australia. The following two papers explore these developments, firstly throughout the late eighteenth century after the arrival of the British in Australia in 1788 to the early twentieth century and then from the late nineteenth century to the last quarter of the twentieth century. The overlap in time is the last decade of the nineteenth and first decade of the twentieth, when Lutheran missionaries were grappling with ways to write words in Central Australian languages. Central Australia has been the site of developments in uniform orthographies, phonetic and phonemic orthographies.

One point is that orthographies have different purposes. Typically, one type of orthography is used for publishing popular literature with less attention to phonetic detail. Another type of orthography was ‘scientific’ and used for scholarly publications read by non-native speakers. Paper 10 is a general introduction to ‘uniform orthographies’, those principled writing systems which were designed for professional and scientific purposes. The purpose of the paper was to show that uniform orthographies have existed throughout the entire history of Australian linguistics since Aboriginal languages were first written. A corollary of this is that non-uniform orthographies have also existed since the first Aboriginal words were recorded. I briefly mention Central Australia and the other phonetic orthographies which were emerging there in the nineteenth century such as the Standard Alphabet. The Standard Alphabet is of further interest because Carl Strehlow’s teacher Carl Seidel (J. Strehlow 2011: 193) was educated in the orthography during his studies at the Friedrich Wilhelm University in Berlin (J. Strehlow pers. Comm.) I show that the IPA was not a universal alphabet until well into the twentieth century. The history of orthography shows that missionaries in two cases rejected ‘scientific orthographies’, first the Lepsius and then the T.G.H. Strehlow version of the I.P.A in favour of a practical orthography based upon a ‘Broad’ transcription.

Against the general background of uniform orthographies, the second kind of orthography is for social and religious purposes. Paper 11 shows the gradual development of a specific
orthography, the Mission Orthography at Hermannsburg over the century from 1877 to 1977. The Mission Orthography was used for personal correspondence. The Strehlow Research Centre contains letters that were written between 1903 to 1964 by the Indigenous and non-Indigenous inhabitants of Hermannsburg at Ntaria.

Orthography is a social practice and the acceptance of a particular orthography is often determined by language ideologies. As Kenny (2017) shows, the Western Aranda people themselves have strongly backed historical versions of the Mission Orthography. This support appears to be based upon a language ideology that orthographies are *pmara-arinya* ‘belong to the land’. These language ideologies require further research.

**References**


Uniform orthographies and phonetics in Central Australia 1890-1910

Abstract
Knowledge of a researcher’s orthographic conventions is necessary for interpreting pronunciation from early sources on Australian Aboriginal languages. Early researchers of Australian languages were more likely to represent sounds consistently if they used a uniform orthography, allowing the problems of English spelling to be avoided. Uniform orthographies began with a concern for the accurate transliteration of literary languages in the late eighteenth century and were further developed for the description of previously unwritten languages in the nineteenth century. This paper traces the development of the uniform orthographies and their pioneering role in linguistic description in Central Australia in the late nineteenth and early twentieth centuries.

1. Introduction
A uniform orthography can be defined as one which is phonographic, that is, each graphic segment is pronounced and has a distinct value. Internal consistency in transcription is more likely to be achieved by defining each graphic segment and the sound that it represents in the orthography. Each sound of a language is assigned a graphic segment: a letter or a combination of letters which is outlined in statement of the orthography or ‘phonetic key’. By contrast, a non-uniform orthography involves values of segments which are ambiguous, especially where the language of transcription is English. Historical and linguistic explanation is useful for understanding the development of English spelling (Crystal 2012:8), but when applied to other languages, English spelling involves a low degree of correspondence between letter and sounds. The problem is particularly acute with English vowels. The five vowel letters of English are polyvalent; that is they each represent a number of English phonemes. For example, ten English phonemes are represented by <a> in English (Coulmas 2003: 186). Conversely, each English vowel phoneme can be represented by different graphemes.
Some segments may only be interpreted at the word level. When words of other languages are transcribed, they may be based on what Dench (2000:59) says is ‘subjective impression of similarity to particular English words’ . Individual symbols in this ‘partially logographic’ spelling have little or no phonetic interpretation, Table 1 compares Eastern and Central Arrernte (Alice Springs) from Willshire (1891) and Henderson and Dobson (1994), a recent source for Arrernte:

Table 1: comparison of Arrernte words

<table>
<thead>
<tr>
<th>Willshire 1891</th>
<th>Henderson and Dobson 1994</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mirror</td>
<td>Pmere</td>
<td>‘country’</td>
</tr>
<tr>
<td>Quasha Un-jew-ma</td>
<td>kwatyeyantyweme</td>
<td>‘drink’</td>
</tr>
<tr>
<td>Meer</td>
<td>Meye</td>
<td>‘mother’</td>
</tr>
<tr>
<td>I-tick-era</td>
<td>Artekere</td>
<td>‘roots’</td>
</tr>
<tr>
<td>I-tich-i-ka</td>
<td>Atyetyeke</td>
<td>‘red’</td>
</tr>
</tbody>
</table>

Although a comprehensive history of the use of phonetics for the description of Australian languages remains to be written, the focus of this paper is on Central Australia in the late nineteenth and early twentieth centuries. I trace the use of uniform orthographies by some researchers in Central Australia, attempting to understand early Australian linguistic research in the context of its time. My argument is that some early investigators of Australian languages used uniform orthographies in their writing of Australian Aboriginal languages and avoided the problems of irregular spelling. The purpose of this paper is to explore the development and use of uniform orthographies in Central Australia, those of the Royal Geographical Society, (henceforth RGS), the Lepsius Standard Alphabet (henceforth: Standard Alphabet), the Hermannsburg Mission orthography and the International Phonetic Alphabet (henceforth IPA).
2. Uniform orthographies in the history of linguistics: issues in current historical research

In discussions of the history of Australian linguistics, there has been little appreciation that uniform orthographies represented a genuine advance on English-based spelling. Uniform orthographies and their value to linguistic research are unacknowledged in the literature on the history of Australian language research. In early descriptions, many contrastive phonetic distinctions were missed due to phonological interference from the researcher’s first language. But Crowley and Austin (1995:59) fail to mention the use of uniform orthographies, claiming that ‘most early researchers were writing these sounds with the spelling system that they had already learned in school for English’. Even for those who acknowledge the influence of uniform orthographies, there appears to be terminological confusion. Koch (2008:186) claims that ‘in accordance with the recommendations made by the RGS for the representation of place names in exotic languages, Mathews attempted to represent sounds using the resources of the English alphabet’. Surely Mathews used the resources of the Roman alphabet, if ‘alphabet’ is defined as ‘a specific set of symbols used in writing to represent sounds’. As argued in this paper, the aim of the RGS orthography was to circumvent the need for English spelling, following the recognition of a poor correspondence between sound and symbol. Dixon, Ramson and Thomas (1990:7) dismiss the work of Mathews and others: ‘Unfortunately, these early recorders were not trained linguists and wrote down Aboriginal words in terms of English sounds rather than in a phonetic alphabet’. However they (1990:15) also claim that ‘Aboriginal languages are now written according to a Roman alphabet’.

The amount of scholarly research on phonetics which was done in the nineteenth century has hardly been acknowledged. Uniform orthographies facilitated the development of phonetics which began with the recognition of sounds. Lepsius for example attempted to collect linguistic information and the Standard Alphabet was based upon a large number of ‘specimens’ from 117 languages (Lepsius 1863:86). The European alphabet was not capable of ‘furnishing a comprehensive system including all the essential differences of sound, which amount to more
than 50 in number, in all these various languages’ (Lepsius 1863:25). He also thought that sounds must be ‘classified upon a physiological basis, so that every sound may find its proper position in the general system’ (Lepsius 1863:39).

Koch (2008:183) points out that grammars and dictionaries began with an explanation of the ‘letters’ rather than the ‘sounds’ of the language. But, if as Abercrombie (1949) claims on the basis of textual evidence, the restriction of the meaning of ‘letter’ to the written character is a recent development in English, then one sense of the word ‘letter’ in the nineteenth century was ‘speech sound’. Abercrombie was concerned that the work of earlier writers may be misrepresented if this fact is not appreciated. A similar ambiguity is observed with words such as 'vowel', 'consonant' and 'diphthong', which have different senses for professionals who work in the fields of linguistics and education. As pedagogical terminology they refer to units of written language. The comment "There are five vowels in English" from a teacher is commonly heard in Australian schools. The ambiguity in the senses of these words creates confusion and to a mistaken impression of the number and identity of sounds in English.

3. Antecedents: Uniform orthographies in the late 1700s

Amongst English-speaking researchers of the late eighteenth century there were opposing views of how foreign language words should be written. Nathaniel Halhed (1751-1830) and others advocated the use of English sound values (Master 1946), evident in The Code of Gentoo Laws (Halhed 1776). The year 1788, which is significant as the date of the first British settlement in Australia, is also the date of the Dissertation on the Orthography of Asiatick Words in Roman Letters (Jones 1788). Sir William Jones (1746-1794) arrived in India in 1783 and is well known for his Third Anniversary Discourse on the Hindus (1786). In attempting to make a system for transliterating the major languages of the Indian subcontinent, Jones realised that they could not be written consistently using English vowel-representation, given the inconsistencies of cacographic English spelling. Jones wanted to represent vowels with the ‘continental’ vowel
system (i.e. continental European with a strong sound to symbol correspondence, particularly Italian) rather than the values of the English vowel letters. There was little difference between Jones and his opponents in the representation of consonant sounds. According to Jones, ‘each original sound may be rendered invariably by one appropriated symbol, conformably to the natural order of articulation, a perfect system of letters ought to contain one specifick symbol for every sound used in pronouncing the language to which they belonged’ (Cannon 1990:249). The Jonesian system was devised for the transliteration of Arabic, Persian and Sanskrit from the characters of their original scripts to those of the Roman alphabet.

Jones’ Dissertation excited great interest amongst his own countrymen and in Europe (Master 1946:7), and there were many attempts to represent the sounds of hitherto unwritten languages according to his conventions. John Pickering (1777-1846) recommended the use of the Jonesian system for recording American Indian languages (Pickering 1820). In 1807 the Reverend John Davies sent the Congregationalist London Missionary Society (LMS) a copy of his manuscript for a “Tahitian Spelling Book” for publication, using the occasion to argue for the ‘continental’ system (Schütz 1994:107). The LMS then adopted the system for Tahitian. Lancelot Threlkeld (1788-1859) worked for the LMS in the 1820s (Gunson 1974). He used the ‘South Sea Islands’ orthography in his Australian Grammar (Threlkeld 1834). The ‘South Sea Islands’ orthography was that of Davies which ‘was printed using the five vowel letters according to the European system, thus influencing all the Polynesian alphabets from that time on’ (Schütz 1994:107). European philologists also adopted the Jonesian system, for example Franz Bopp (1791-1867) made use of it for the transliteration of Sanskrit (Bopp 1820) after his sojourn in London (1817-20) where he studied Sanskrit manuscripts.

3. Royal Geographical Society conventions 1836

The Geographical Society of London was established in 1830 (Cameron 1980). The journal was first published with the title Journal of the Royal Geographical Society (1831-1878) and later as the Proceedings of the Royal Geographical Society (1879-1892). From 1893 to the present it has
been published as the *Geographical Journal*. The Journal was read by researchers in Australia in the 1830s (McLaren 1996, *passim*).

The RGS orthography was used primarily by travellers, explorers and geographers who needed a guide to the correct pronunciation of foreign names. Aim number three of the Prospectus of the Journal (1831) was the development of a ‘more uniform and systematic orthography than has hitherto been observed, in regard to the names of cities and other objects; and a more precise and copious vocabulary than we at present possess, of such objects’ (Prospectus of the Royal Geographical Society 1831: xi). The first explicit statement of its orthographic conventions (Tucker, 1971) appears to have been in a footnote to *Observations on the Coast of Arabia between Rás Mohammed and Jiddah* (Wellsted 1836):

> The orthography as far possible, is reduced to a fixed standard, each letter having invariably its corresponding equivalent. The consonants are to be sounded as in English, the vowels as in Italian. The accents mark long vowels, and the apostrophe the letter ’āın; gh and kh are strong gutturals; the former often like the Northumbrian r, the latter like the Scotch and Welsh *ch*: *a* as in far; *e* in there; *i* in ravine; *o* in cold; *u* in rude, or *oo* in fool; *eɪ* as *ey* in they; *au* as *ow* in fowl; *aɪ* as *i* in thine; *ch* as in child.

Wellsted’s use of the RGS conventions was for Arabic, an Afro-Asiatic (-Semitic) language with a Classical literature but the footnote was significant because its use for the transcription of unwritten languages of Australia.

The vowel letters would be pronounced as for Italian and as read in selected English words: the <a> in ‘far’, <e> in ‘there’, <i> in ‘ravine’, <o> in ‘cold’ and the <u> in ‘rude’. The consonant letters were to be pronounced ‘as for English’. In practice however, the RGS orthography made allowances for sounds that were not found in Standard English. The footnote reveals the writer’s familiarity with the sounds of dialects of English and an attempt to explain the unfamiliar by the familiar. The ‘Northumbrian r’, probably [ʁ], the voiced uvular fricative allophone/variant of post-alveolar approximant /ɻ/ is described as similar to a ‘guttural’ sound of Arabic, probably ِغ gayn, representing the voiced velar fricative [ɣ], which he transliterated as <gh>. The voiceless velar fricative *ch* [x] of Welsh and Scots is compared with Arabic, ِخ xāʿ and transliterated as
*kh*. Digraphs and the apostrophe were used to represent sounds for which there was no conventional spelling in European languages: ain ʕ, a voiced pharyngeal fricative [ʕ] was transliterated with an apostrophe.

The RGS conventions were gradually applied to more languages and used for transcription of hitherto unwritten languages, including in Australia where all the Aboriginal languages of the continent were unwritten until the arrival of Europeans in Australia in 1788 and in Central Australia in the 1870s. In Australia, as elsewhere, some early researchers used uniform orthographies and others wrote sounds according to their knowledge of English. The former are likely to be more consistent and the continental values of vowels represented by <a>, <i>, and <u> are close to the values which are found in many Aboriginal languages.

The naturalist Dr John Lhotsky (1795-1865) collected language data in the Australian Alps from January to March 1834 and from Tasmania in 1836. His contribution to the *RGS Journal* (Lhotsky 1839) appears to be the first example of the application of RGS conventions to an Australian language. The Western Australian lawyer and explorer George Fletcher Moore (1798-1886) read the *RGS Journal* and utilised the RGS conventions (Moore 1842:vii; Moore 2008b:316). Robert Hamilton Mathews (1841-1918), worked as a surveyor (Thomas 2007:161) and collected language data from 1893 until his death. Mathews used the 1885 version of the RGS orthography for his papers on numerous Aboriginal languages including Aranda and Luritja from Central Australia (Mathews 1907a, 1907b).

6. **The recognition of consonant sounds**

A researcher’s awareness of foreign sounds increased with time spent in the field. William Dawes (1762-1836) used a uniform orthography to record the Indigenous language of Sydney and recognised [ŋ] in initial position (Steele 2005:153). As Steele (2005:132) claims, the Dawes
notebooks represent a ‘process of learning’ of the language as early as 1790. Their awareness of foreign sounds was greater if they had previously learned other foreign languages. Threlkeld (1834:6) encountered the velar nasal [ŋ] word-initially, based upon his hearing of Polynesian languages in which the sound commonly occurs at the beginning of a word. Threlkeld’s recognition of the velar nasal for Awabakal probably led other Australian researchers to recognise the sound in other Aboriginal languages.

Even though researchers were initially encouraged by the RGS conventions to use the values of English consonants for the practical reason that most of the readers of their work were English-speaking Britons, they invariably found ways to be creative in representing unfamiliar sounds and they devised ways of writing them. Augmentation of the Roman alphabet was necessary to write the new sounds. Early researchers had a pioneering role in recording these sounds on paper for the first time.

Lyon (1833) heard a sound in Nyungar (Dench 1994) which he compared with Classical Hebrew [ʕ] ayin, a voiced pharyngeal fricative [ʕ]: ‘the Ain of the Hebrew, the pronunciation of which has been so long a desideratum to the philologists of Europe, these people [Nyungar speakers] seem to possess in perfection’ (Lyon 1833). Lyon doesn’t identify the sound in Nyungar which the ayin resembles. Although [ʕ] doesn’t occur in Nyungar, this example shows Lyon attempting to describe the unfamiliar by the more familiar. Lhotsky (1839) noted that <j> would be ‘more accurately rendered by Polish Ź’ which has no equivalent in the English tongue’. He appears to have been referring to /ʑ/, the voiced alveolo-palatal fricative.

Not all of the letters of the Roman alphabet were used. Early researchers edited their work and made orthographic choices, using a selection of letters. The consonant letters of the Roman alphabet which were discarded are as significant as those which were included. Lyon (1833), comparing sounds in the Nyungar language with the Classical Hebrew alphabet, noticed that the Nyungar language had ‘neither the Zain [z], the Samed [s], nor the Schin [ʃ] of the Hebrews. The
letter s, they are incapable of pronouncing’. He felt that he was ‘obliged to throw out every letter which was in the least allied in sound to the letter s’. In 1833, Moore obtained the name ‘carrar’ for the black goanna (*Varanus tristis*) from Weeip, one of his Nyungar-speaking informants (Cameron 2009). The entry was changed to ‘kardar’ for Moore’s later *Descriptive Vocabulary* (1842:56) after the redundant <c> had been eliminated from the orthography. The Benedictine monk Dom Rosendo Salvado (1814-1900) also recorded Nyungar words according to his own complex linguistic background (Galician, Castilian and Italian) with the result that ‘these words often look very different, in his version, from the forms accepted by the Australian users of English today (Stormon 1977: xvii). Salvado (1851) reinstated <c> in his transcription of Nyungar words for the alveolo-palatal stop [c] which Moore represented with <dj>, as with the word for ‘wedgetailed eagle’:

Moore 1842  
waldja

Salvado 1851  
ualce, ualge

Although the IPA eventually adopted the same character for the alveolo-palatal stop [c], this serves as an example of how the use of Italian consonantal values would not have helped the English-speaking reader. The users of the RGS were English-speakers and so the use of English consonantal values, where this aim was realistic, was practical.

The early work of Scott Nind (1797-1868) records the Nyungar language inconsistently. The values of the individual segments are not spelled out as no phonetic key to his transcription is provided (See Table 2). Nind (1831:47) notes that the language ‘abounds in vowels’. The word initial [ŋ] sound was commonly misidentified or not recognised by researchers of Australian languages, such as Nind (1831) and Lyon (1833), as can be seen in comparison with that of later researchers who used uniform orthographies in Table 2.
Table 2: Early Transcriptions of Nyungar word for ‘Black Duck’

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nind 1831:</td>
<td>wainern</td>
</tr>
<tr>
<td>Lyon 1833</td>
<td>goona-na</td>
</tr>
<tr>
<td>Grey 1839</td>
<td>ngoon-un</td>
</tr>
<tr>
<td>Moore 1842</td>
<td>ngwonana</td>
</tr>
<tr>
<td>Salvado 1851</td>
<td>n-unan</td>
</tr>
</tbody>
</table>

7. RGS Conventions in the late nineteenth century

The RGS conventions were eventually published as a system in the *Proceedings* in 1885 under the title of a ‘System of orthography for native names of places’ (RGS 1885) which appears in Table 3. The RGS aimed for a pronunciation of the ‘true sound pronounced locally’.

Hyphens were not allowed, and accent marks were only allowed for indicating stress. Characters were drawn from the twenty six letters of the Roman alphabet, with the addition of eight other characters. Of the thirty four characters, four digraphs represented diphthongs. Four other digraphs represented consonant sounds. The consonant digraphs were increased to nine in the 1892 revision.

As more sounds were discovered, the resources of the Roman alphabet were found to be inadequate but the RGS remained committed to the letters of the Roman alphabet with limited augmentation: ‘A system which would attempt to represent the more delicate inflections of sound and accent would be so complicated as only to defeat itself. Those who desire a more accurate pronunciation of the written name must learn it on the spot by a study of local accent and peculiarities’ (RGS 1885).
8. The Western Australian document of 1901

There appears to have been limited progress in the adoption of the RGS orthography in Australia in the late nineteenth century. The conventions were adopted officially in Western Australia but place names continued to be spelled inconsistently. In 1901 Western Australia issued *The Spelling of Native Geographical Names* following correspondence between the Western Australian Minister for Lands and the Royal Geographical Society in London. Robert Cecil Clifton (1854-1931) became Western Australian Under Secretary for Lands in 1891 (Cohen, 1979). The Society had referred Clifton to the conventions of 1885 and reassured him that the RGS orthography would be able to record all of the place names of Western Australia. Clifton said that the Lands Department officials would attempt to implement the RGS system ‘but require the assistance of the public, and more particularly the Press to back them up’. Settlers would move to a new location in the Western Australian goldfields and adopt its Aboriginal name. Clifton attempted to implement a uniform orthography for recording place names in the Western Australian goldfields. Official spelling guidelines were ignored in favour of spellings based upon English. Clifton was frustrated by ‘the objection of officials and people generally to adopting the system’. As the Western Australian experience shows, the appreciation of uniform orthographies presupposes a certain level of education and language awareness, often lacking in the frontier communities of nineteenth-century Australia and even in twenty-first century Australia. English-based spellings have continued to co-exist with uniform orthographies to the present day.
Table 3: Adapted from the *System of Orthography for Native Names of Places*, Royal Geographical Society (1885)

<table>
<thead>
<tr>
<th>Letter(s)</th>
<th>Pronunciation and Remarks</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td><em>ah, a as in</em> father</td>
<td>Java, Banána, Somáli, Bari, Tel-el-Kebír, Oléléh, Yezo, Medina, Levúka, Peru</td>
</tr>
<tr>
<td>E</td>
<td><em>eh, e as in</em> benefit</td>
<td>Fiji, Hindi</td>
</tr>
<tr>
<td>I</td>
<td>English e; I as in ravine; the sound of ee in <em>beet</em>…Thus, not <em>Fjee</em>, but</td>
<td>Tel-el-Kebír, Oléléh, Yezo, Medina, Levúka, Peru</td>
</tr>
<tr>
<td>O</td>
<td><em>o as in</em> mote … … … …</td>
<td>Tokio</td>
</tr>
<tr>
<td>U</td>
<td>Long <em>u as in</em> flute; the sound of <em>oo in</em> boot. Thus, not <em>Zooloo</em>, but</td>
<td>Zulu, Sumatra.</td>
</tr>
<tr>
<td></td>
<td>All vowels are shortened in sound by doubling the following consonant.</td>
<td>Yarra, Tanna, Mecca, Jidda, Bonny.</td>
</tr>
<tr>
<td></td>
<td>Doubling of a vowel is only necessary where there is a distinct repetition of the single sound.</td>
<td>Nuuldía, Oosima</td>
</tr>
<tr>
<td>Ai</td>
<td>English <em>i as in</em> ice … … … …</td>
<td>Shanghai.</td>
</tr>
<tr>
<td>Au</td>
<td><em>ow as in</em> how … … Thus, not <em>Foochow</em>, but</td>
<td>Puchau.</td>
</tr>
<tr>
<td>Ao</td>
<td>Is slightly different from above … … …</td>
<td>Macao.</td>
</tr>
<tr>
<td>Ei</td>
<td>Is the sound of the two Italian vowels, but is frequently slurred over, when it is scarcely to be distinguished from <em>ey</em> in the English they.</td>
<td>Beirút, Beilúl.</td>
</tr>
<tr>
<td>B</td>
<td>English <em>b</em>.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>is always soft, but is so nearly the sound of <em>s</em> that it should be seldom used. If <em>Celebes</em> were not already recognised it would be written <em>Selebes</em>.</td>
<td>Celebes.</td>
</tr>
<tr>
<td>Ch</td>
<td>is always soft as in <em>church</em> … … …</td>
<td>Chingehin.</td>
</tr>
<tr>
<td>D</td>
<td>English <em>d</em></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>English <em>f, ph</em> should not be used for the sound of <em>f</em> … …</td>
<td>Haifong, Nafa.</td>
</tr>
<tr>
<td>G</td>
<td>is always hard. (<em>Soft g</em> is given by <em>j</em>) … …</td>
<td>Galápagos.</td>
</tr>
<tr>
<td>H</td>
<td>is always pronounced when inserted.</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>English <em>j</em>. <em>Dj</em> should never be put for this sound.</td>
<td>Japan, Jinchuen.</td>
</tr>
<tr>
<td>K</td>
<td>English <em>k</em>. It should always be put for the hard <em>c</em> … … … Thus not <em>Corea</em>, but</td>
<td>Korea.</td>
</tr>
<tr>
<td>kh</td>
<td>The Oriental guttural … … … …</td>
<td>Khan.</td>
</tr>
<tr>
<td>gh</td>
<td>is another guttural, as in the Turkish … … …</td>
<td>Dagh, Ghazi.</td>
</tr>
<tr>
<td>m</td>
<td>As in English.</td>
<td></td>
</tr>
<tr>
<td>ng</td>
<td>Has two separate sounds, the one hard as in the English word <em>finger</em>, the other as in <em>singer</em>. As these two sounds are rarely employed in the same locality, no attempt is made to distinguish between them.</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>As in English.</td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>Should never be employed: <em>qu is given as kw</em></td>
<td>Kwantung.</td>
</tr>
<tr>
<td>r, s, t, v, w, x</td>
<td>As in English</td>
<td>Sawákín.</td>
</tr>
<tr>
<td>Y</td>
<td>Is always a consonant, as in <em>yard</em>, and therefore should never be used as a terminal, <em>i</em> or <em>e</em> being substituted. Thus not <em>Mikindáni</em>, but <em>Kwaly</em>, but</td>
<td>Kikuyu, Mikindáni, Kwale</td>
</tr>
<tr>
<td>Z</td>
<td>English <em>z</em> … … … … …</td>
<td>Zulu</td>
</tr>
<tr>
<td></td>
<td>Accents should not generally be used, but where there is very decided emphatic syllable or stress, which affects the sound of the word, it should be marked by an <em>acute</em> accent.</td>
<td>Tongatábu, Galápagos, Paláwan, Saráwak.</td>
</tr>
</tbody>
</table>
9. German missions and the Standard Alphabet in Australia

The languages of Central Australia were the first to have phonetic and phonemic analyses in the twentieth century. In this section I examine the ways in which the phonemes of Central Australian languages are represented, particularly Arrernte and Luritja, and identify points of over-differentiation and under-differentiation.

German Lutheran missionaries had a key role in developing and using uniform orthographies. The first Lutheran mission was established in South Australia in 1838. By 1866 a mission had been established among the Dieri (Diyari) at Lake Killalpannina in the remote north of the colony of South Australia. Another mission was established at Hermannsburg in the Northern Territory in 1877 among speakers of Aranda (Arrernte, Arrarnta) and Luritja. The first missionaries at Hermannsburg Pastors Adolf Hermann Kempe (1844-1928) Louis Gustav Schulze (1851-1924) were initially influenced by the way in which Dieri had been written.

Kneebone (2005:104) shows that the Lutheran missionaries at Killalpaninna wrote Dieri according to the Standard Alphabet, ‘In terms of its time and milieu, Lepsius’ Standard Alphabet fits with the early orthography of the Dieri language’. The German linguist and Egyptologist Karl Richard Lepsius (1810-1884) published an alphabet in German (1855) with an English translation as the Standard Alphabet for Reducing Unwritten Languages and Foreign Graphic Systems to a

Figure 1: The characters of the Standard Alphabet (Lepsius 1855)
Uniform Orthography in European Letters. A revised English version was published in 1863. Lepsius was trained in classical philology at Göttingen and Berlin from 1829 until 1833. He published a Nubian Grammar (Lepsius 1880) and researched the classification of African languages. One of his main interests was in the relationship between spoken and written language.

In the view of Kneebone (2005: 355) the Standard Alphabet was to be ‘elastic enough to accommodate both goals’, that is, as a practical alphabet for the use of the mission and as a system of scientific notation. The second goal required a universal alphabet and the Standard Alphabet was designed to represent the phonetic details of the languages of the world.

One of the principles of the Standard Alphabet was to use single letters and diacritics to represent sounds, rather than using combinations of letters because a digraph or trigraph could be interpreted either as representing a single segment or a cluster of more than one segment. For example, the use of <ṅ> in the Dieri alphabet to represent the velar nasal [ŋ], represented the transliteration of ङ from the Sanskrit Devanagari script, a convention which was adopted from William Jones (Müller 1864:VI). The Adelaide missionaries Teichelmann and Schürmann (1840) had represented the velar nasal for Kaurna (Adelaide Plains, South Australia) with <ng> (Teichelmann and Schürmann 1840). In English spelling and the RGS orthography, <ng> can represent the velar nasal [ŋ] or the consonant cluster [ŋg]. The difficulty in using <ng> for the velar stop in his phonetic key was not recognised by Walter Baldwin Spencer (1927:610), as <ng> retained the ambiguity that it has in English. It would inevitably be misinterpreted by English speakers, for example <inga> could be read Arrernte [ŋɡa] ‘foot’ or [ŋŋa] the Ablative suffix in Arrernte which is also spelt <inga> by Spencer (1927:608), creating confusion over the pronunciation of his spelling Alcheringa ‘belonging to the Alchera, or mythic time’. The Lepsius alphabet took care of this ambiguity by representing the velar nasal with a single letter and diacritic.

The letters x and q were adopted for the earliest recording of the alveolo-palatal stop in the Aranda language. A Greek χ symbol was used with a stroke placed above it, to indicate that it was
a palatal sound, such as <ch> in German *ich* (Lepsius 1981: 70). Lepsius based his system on Bopp’s use of a vertical dash placed above the guttural letters k, g, n and X to indicate the palatal value. A probable reason for that is that <x> represents a ‘spare’ letter which represents a consonant cluster [ks] in conventional alphabets. Kempe (1880:46) has airixina *er wird sehen* ‘he will see’.

Kempe notes that ‘Das x wird ausgesprochen wie tj’, The x is pronounced as tj’. Later <x> was abandoned and <tj> was adopted for the sound. The same sound is written with a <q> in the translation of Mark 7:31-37 (Kempe 1880:48) as in the Aranda word urbuqa *einige*, ‘some’ later written urbutja

Considering the origin of the <tj> spelling, Turpin (2004) claims that,

‘For example Pitjantjatjara and the Finke River Mission spelling used at Hermannsburg and surrounding outstations use ‘tj’ possibly because German uses these letters for a similar sound, whereas Warlpiri uses ‘j’ because English uses this letter for a similar sound’.

More likely, as <j> was already being used to represent the palatal approximant which it represented in the German orthography, the digraph <tj> was adopted to represent the stop. It may have been that the Aranda orthography was interpreted as a stop-fricative or affricate sequence of [tʃ]. Similar sounds in German are usually represented with four-letter combinations such as <tsch> and <dsch>. These are based upon the trigraph <sch> [ʃ] and used in loanwords such as Dschungel ‘jungle’ and tschüs ‘bye, cheerio’.

Kempe (1891) included 15 consonants, including voiced and unvoiced stops. Effectively, then 12 of the consonant graphemes of the language are recorded, along with five vowels and three diphthongs. The current Western Arrarnta orthography utilizes twenty six consonant graphemes and four vowel graphemes (Roenfeldt 2006:167). The difference between Planert and Kempe was in the number of vowels and diphthongs used. Planert (1907) writes 13 monophthongs, 18 diphthongs and three triphthongs. Planert said that ‘triphthongs are not rare’, apparently unaware of the use of the diaeresis marker, in Kempe’s example leoïka. The use of diaeresis is common in philology to distinguish diphthongs from combinations of vowels. In Kempe’s wordlist in which
the diphthong <eo> was separated from the ika suffix in leoa ‘downward’. Planert’s work seems to be an analysis of Kempe’s wordlist as though the trigraphs represented triphthongs sounds, rather than adjacent vowels separated by diaeresis.

The first decade of the 1900s saw the publication of analyses of Aranda by Planert (1907), Mathews (1907b), Erhard Eylmann (1908) and Herbert Basedow (1908). Eylmann and Basedow were trained in the natural sciences in Germany. Wilhelm Planert (b. 1882) was trained in an increasingly professionalized discipline of linguistics in Germany. There was a growing division between the need for a ‘scientific’ alphabet and the practical publication and literacy needs of the Australian missions which were publishing increasing amounts of literature in Aboriginal languages. It is apparent that Planert was appealing for the use of a scientific orthography by his advocacy of <ṅ> to represent the velar nasal, even after that symbol had been abandoned by the Dieri mission. By the 1880s it appears that the Standard Alphabet had fallen into disuse despite initial support from the mission societies. Missionary Johann Flierl (1858–1947), a Lutheran missionary in Australian and New Guinea, changed the Dieri orthography in 1878 and replaced the single letters of the Standard Alphabet with digraphs. Its complexity and the large number of unwieldy diacritics are the usual reasons given as to why the Standard Alphabet was discontinued by the mission societies who had originally supported it. Sweet (Henderson 1971:253) criticised the Standard Alphabet for ‘the enormous number of new types required. Most of them [the missionaries] prefer to use new letters formed by more or less consistent modifications of the existing italic letters’.

An issue which Planert raises about the alveolo-palatal stop in Aranda is that the Mission orthography <nj> could represent the alveolo-palatal nasal [n] or a cluster comprising the alveolo-palatal nasal and stop [nc]. However, it is apparent that Strehlow realised that <nj> could represent <ntj> and that the Mission orthography was ambiguous on that point. There is no provision for [n] among the palatal series in Planert’s consonant table. In his response to Planert, Strehlow seemed to regret the fact that <j> hadn’t been more distinguished from <y> by his missionary predecessors. Basedow used <ny> to indicate [n] as distinct from [nc] which he writes
as <nj>, for example iwunya /iəɲa/ ‘mosquito’ (Basedow 1908:219), and kwinnjē /kwaɲca/ ‘windbreak’. The practice of using <nj> to represent both the alveolo-palatal nasal [ɲ] and a consonant cluster [nc] may have been carried over to Hermannsburg in Central Australia because they weren’t distinguished in the earlier work at Lake Killalpaninna. Strehlow appears to use tilde above <n> for the alveolo-palatal nasal in Luritja words throughout his 1909 wordlist, for example, ngalatarbañi ‘hereinkommen, come into’. It is apparent that he doesn’t use the tilde for Aranda words, perhaps because the spelling system for Aranda had already become established.

Aranda words were already recorded in published works and it was more difficult to make changes to their spellings. Established alphabets for written Dieri and Aranda were taught in the mission schools and used for all written communication including writing letters, postcards and in liturgy and biblical translation by the time that Strehlow appears to have begun his language research on Luritja around late 1905 (J. Strehlow 2011:917). Mathews (1907) wrote that “For the Luritja grammar and vocabulary I am indebted to Mr. C. F. T. Strehlow, who has known the tribe for several years”. The mission orthography had improved since the time of Kempe (1891) representing the palatal nasal as in pattarinja ‘rock dweller’ rather than as in Kempe’s equivalent, aputaringa, in which he appears to have written <ng> for [ŋ].

Over a 20-year period the Hermannsburg missionaries added more symbols as their ability to discriminate the sounds improved. A sound unfamiliar to English speakers is described as an ‘unrounded back approximant /ɰ/ articulated in the velar and uvular regions’ (Henderson 2013:20-21) which possibly has fricative allophones. The sound can be compared with the voiced uvular fricative or approximant (Pullum and Laduslaw 1986:139) and was usually represented with <r> as in rera ‘kangaroo’ (Kempe 1891:42). Given the similarity with the Northern European r sounds it is not at all surprising that German speakers represented it as a variety of r.

Carl Strehlow in response to Planert’s use of <h>, representing a phoneme that does not exist in Aranda:

‘I do not know of the consonant h in Wonkaranda, which by contrast comes before a guttural r, which in contrast to the usual r, I have given the Spiritus asper ‘r’. For a white person it takes practice to produce this sound. One attempts to make the ch sound (as in ach!) combined with a soft and non-rolled r, for example to pronounce rarka as rcharka’. 
The *spiritus asper* of Latin or ‘rough breathing’ <`>` of Greek was used to indicate aspiration with the Greek letter rho, but Strehlow appears to have used it with the <`r`> to indicate the velar approximant. Spencer and Gillen represented the sound inconsistently through their work, (Moore 2008a:282) as <`k`>, <`ch`>, and <`g`> but evidently not with <`r`>, as mostly probably, [ɰ] doesn’t resemble the r sound used in the English dialects that they spoke. This appears to be an example of ‘alternating perceptions’ described by Boas (1889), or in modern terms ‘phonological interference’, in which a sound is perceived and recorded as different sounds from the hearer’s phonological system. The ability to recognise a sound depends upon the closeness of the sound to a sound in the speaker’s own phonological inventory. The velar approximant was similar to a sound in Turkish, represented in RGS a <`gh`> as:

Dağ ‘mountain’ (modern Turkish orthography)

Dagh (RGS 1885).

11. Over-differentiating consonants

Early researchers tended to under-differentiate the consonants of the language and to over-differentiate the vowels. The inclusion of voiced and unvoiced stops in earlier work represents the difference between a phonetic and a phonological representation. Modern Arrernte has allophones of the alveolo-palatal stop which differ in voicing. In his Aranda Grammar, Wilhelm Planert (1907) claimed that there both voiced and unvoiced variants of /c/ needed to be represented in the orthography:

`tš` and `dž` are unfortunately not distinguished, both being represented by `tj`. Overall the missionaries are unable to distinguish Fortis from the corresponding Lenis.

Planert’s representation of these sounds is similar to their representation in the conventional German orthography. However, as Strehlow (1908) said in his response to Planert, there was no need to distinguish ‘fortis’ and ‘lenis’ stops. The addition of a voicing distinction for the alveolo-
palatal stop and the use of different symbols for some of the other sounds are the only differences between Kempe (1891) and Planert (1907). Planert was only able to work with his informant, the former Hermannsburg missionary Nicol Wettengel, a non-native speaker of Aranda, for two weeks (Planert 1907:1). John Strehlow (2011:961) claims that ‘Wettengel had relied heavily on Kempe’s 1891 publication’. Wettengel had also learned the use of the missionary alphabet through his own work as a missionary at Hermannsburg and Text number 1 in the Planert article utilises the conventional Mission orthography spellings from the Kempe grammar and other mission publications.

12. The IPA in Australia

Uniform orthographies preceded the International Phonetic Alphabet (IPA) by decades. Although the IPA eventually became ‘international’ it was not sufficiently developed to record all of the sounds of Australian Aboriginal languages as reflected in the representation in the early twentieth century. The earliest use of the IPA in Australian linguistics appears to have been by the South Australian botanist John McConnell Black (1855-1951), for a language of the Western Desert (Black 1915). Black also used the IPA in language description in 1917 and 1920 ‘identifying retroflex, and some interdental consonant sounds, as well as a wide range of phonetic vowels’ (Simpson et al 2008:93). Black (1915) represented only 11 out of the 17 consonant phonemes of the Western Desert dialect which he was describing, missing six of the phonemes which other linguists also missed for other Australian languages, including three laminal (lamino-palatal) and three retroflex (post-apico-alveolar) sounds. Although Black used 14 letters, three of these were redundant as Black included letters for both voiced and unvoiced stops. A comparison with Mathews (1907a), wordlist, made with Strehlow’s assistance reveals that the latter distinguished 11 consonants in two related languages, Luritja and ‘the Erlistoun dialect’ of Western Australia. However by 1920, Black had represented a larger inventory of phones in the language which he was describing through reading earlier sources and by language comparison through
corresponding with Daniel Jones of the International Phonetic Association. WH Douglas made
the first phonemic analysis of a Western Desert language (Douglas 1955) which included the
lamino-palatal (‘dental’ in Douglas) and post apico-alveolar (‘cerebral’ in Douglas) sounds.
Douglas reduced the vowels to three phonemes. His phonemic analysis involved far fewer vowels
than the phonetic analysis of Black 1915 as seen in Table 5.

Thomas (2007:162) observes that ‘the RGS orthography was not intended for students of
ethno-linguistics’. However, it was also widely used by ethnographers and linguists although its
original purpose was geographical: to represent place names accurately and consistently on maps,
not merely ‘thoughout the colonies’ as Thomas avers, but throughout the world. The ‘broad’ RGS
system was judged more suitable for recording names on maps which would need to be
pronounced by English-speakers who would be unfamiliar with the symbols of the increasingly
specialised IPA. The RGS orthography retained its cartographic function for over a century
(Aurousseau 1942).

By contrast, the initial purpose of the IPA was the consistent representation of sounds for
language teaching and Spelling Reform. It was devised by speakers of English and French, the
languages with the most cacographic alphabets. Albright (1958:48) explains that ‘the immediate
cause for the organisation of the association was the extreme difficulty of teaching English
pronunciation by means of the conventional English alphabet’.

Thomas (2007:182) claims that ‘in complete contrast with the IPA, which used special characters
to reproduce unique phonetic values, the Royal Geographic Society employed English notation’.
Table 5: Representation of consonants in Western Desert dialects

<table>
<thead>
<tr>
<th>Current I.P.A.</th>
<th>Helms 1896(^{184})</th>
<th>Black 1915</th>
<th>Douglas 1955</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>p, b</td>
<td>p, b</td>
<td>P</td>
</tr>
<tr>
<td>T</td>
<td>t, d</td>
<td>t, d</td>
<td>T</td>
</tr>
<tr>
<td>K</td>
<td>k, g</td>
<td>K, g</td>
<td>K</td>
</tr>
<tr>
<td>J</td>
<td>y</td>
<td>J</td>
<td>Y</td>
</tr>
<tr>
<td>D</td>
<td>ng</td>
<td>η</td>
<td>Ng</td>
</tr>
<tr>
<td>L</td>
<td>l</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>M</td>
<td>m</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>N</td>
<td>n</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Σ</td>
<td>r</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Θ</td>
<td>j, tch, ch</td>
<td>Θ</td>
<td>Tj</td>
</tr>
<tr>
<td>ñ</td>
<td>Ly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>Ñ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>妥协</td>
<td>Τ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>η</td>
<td>Ν</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Λ</td>
<td>Λ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>r</td>
<td>Ρ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Ai</td>
<td>Ai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aie</td>
<td>aie as in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Naienmunni ‘sit’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>I</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ue in Tuennta, leg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{184}\) Richard Helms (1842-1914) was a zoologist and botanist
In fact, the RGS used the Roman alphabet and the earliest version of the IPA (1888) was based upon the Broad Romic script of Henry Sweet (1845-1912). The IPA was conventional, that is, based upon existing conventions for the representation of sounds of European languages. Sweet advocated the use of conventional letters of the alphabet wherever possible, because of the cost and difficulty of employing special characters. Obviously it made sense to retain familiar characters to represent sounds, e.g. <p> for the bilabial stop.

Broad Romic had forty-one characters of which only eleven were special and non-conventional, including turned and inverted characters and digraphs. The first IPA system, the “Revised” IPA of August 1888 only had forty-seven characters, of which twenty-seven were conventional. Examples of the use of sounds in the IPA were drawn from English, French and German and other European languages. By contrast the RGS of 1885 had thirty-three characters. Some place name examples in the RGS 1885 were drawn from non-Indo-European languages such as Arabic and Turkish and give the impression that the RGS orthography was a more international system than the near-contemporary (1888) version of the IPA. Henry Sweet (1971:253) commented on the inadequacies of the IPA in 1911:

Although well suited for French, this alphabet must from a wider point of view be regarded as a failure. It is too minute and rigid for practical, and yet not precise enough for scientific purposes. In short, although it has done excellent service, and has helped to clear the way for a notation which shall command general acceptance, it cannot be regarded as a final solution of the problem.

Sweet (1971:253) also said, ‘it is not really an international system’. Later, the development of phonetic theory and the extension of the IPA’s international membership led to the adoption of additional special characters, representative of the sounds of the world’s languages as was becoming evident in the 1912 version, as seen in Table 6.
According to Coulmas (2003:103), the IPA has grown significantly and now has one hundred and eleven characters in addition to thirty-one diacritics and thirty-three characters for suprasegmental features.

There is a tension between accuracy in representing sounds and the utility of the IPA as a practical alphabet. As phonetic distinctions were discovered and were represented by a larger number of characters, it was felt that there was a need for ‘broad’ and ‘narrow’ transcription. Understanding the history of the IPA helps to understand why Mathews, who died in 1918, didn’t use it and why Wharton (1928) writing about universal alphabets in 1912, didn’t mention it. The use of both RGS and IPA for different functions can be seen in the work of Norman B. Tindale (1900-1993), a century after the footnote to Wellsted’s paper of 1836. Tindale used a revised version of the RGS orthography called RGSII (Geographic) (Tindale 1935; Walter 1988) alongside a form of the IPA called the Adelaide University Phonetic System (AUPS), (Monaghan...
RGSII dates from approximately 1921 (Gleichen 1921) and has around forty six characters including sixteen digraphs. It is likely that Tindale used Geographic for ‘broad transcription’, that is, more approximate pronunciations of words from Aboriginal languages. Uniform orthographies were superseded by phonemic orthographies in the second half of the twentieth century in Australia.

13. Travel and language learning

Education, travel and exposure to foreign languages in both speech and writing enabled researchers to reflect upon language and how sounds are represented on the page and contributed to their language awareness and experience in language comparison. Not all of those who claimed to use uniform orthographies used them effectively or correctly. The transcriptions of some of the words from Western Australian languages in Curr (1886) are internally inconsistent (Dench 2000), even though the work was published nearly 50 years after the first use of the RGS conventions by Australian researchers. Many of the contributors to Curr 1886 were amateurs with a limited knowledge of other languages. As Boas (1889) discovered, the language of the researcher will influence the sounds that they are able to distinguish. This was also true of the additional languages and dialects which a researcher acquired. Educated and travelled researchers were familiar with the vernacular languages and dialects of Europe and the languages and English dialects of Britain and Ireland. They tended to be more aware of the limitations of English spelling because they had not only written English but had experience of foreign language alphabets in which each letter had a distinct pronunciation which had to be learned. The researchers were speakers of diverse English dialects and aware of the graphic representation of their sounds. The vowel system of the Scots dialect of English is very different from that of southern English dialects, having less ambiguity in the pronunciation of the vowel letters (Dench 2000:63). Robert Menli Lyon (b. 1789) was aware of the vowel differences among British dialects of English: ‘in every case therefore in which the vowel a is not thus marked, it is pronounced in the manner usual on the continent of Europe and North Britain’ (Lyon
German researchers had encountered dialects of German such as written versions of Plattdeutsch or Low German which was used by Louis Harms, the founder of the Hermannsburg Mission society (Reller and Harms 2008:85). So, their background knowledge was conducive to language awareness and comparison of the sounds of previously unwritten languages.

Researchers had often engaged with what Clarke (1959:176) describes as ‘that form of foreign travel which we know as the study of the classics’. Many were trained in classical languages such as Greek and Latin. Nor was their training limited to the familiar European languages. Sanskrit was taught widely in Germany in the nineteenth century. Some of the early Hermannsburg missionaries were evidently familiar with Sanskrit and the conventions for transliterating Sanskrit, for example Luise Wendlandt-Homann (1987:26) who had studied Sanskrit at the Leipzig mission Institute in Germany. Some had encountered Hebrew, an Afro-Asiatic language which has sounds which are very different from English.

Lack of language awareness was particularly acute with researchers from monolingual backgrounds. Although Baldwin Spencer claimed that he used the RGS, all of sound values in his phonetic key of 1927 are exemplified by English words. For example,

ä in ‘an’

ë in ‘end’.

Spencer and Gillen (1927: 610) claim that:

There are two separate sounds. If the letters occur in the middle of a word, they are actually sounded separately as in mangrove. If at the beginning of a word, they are sounded as in English. Both sounds occur in such a word as Ngurangura, ‘evening’.

But <ng> occurring at the beginning of a word is not like English. Only /ŋ/ occurs in ngurangura /ŋuɾəŋuɾə/. Carl Strehlow, one of Spencer’s critics, claimed to use the ‘continental’ system and that his orthography differed markedly from that of Spencer:
When you compare my work with Spencer and Gillen’s, you will immediately notice that our spelling of names is completely different, because the two gentlemen choose the English spelling, in contrast use the continental one. It is a pity that Spencer and Gillen did not use the latter as well, which Mr Spencer as professor in Melbourne must have known. Carl Strehlow to Moritz von Leonhardi 13:12:1906, quoted in Kenny (2013:98).

Edward Stirling (1896:139) used the RGS orthography, not always correctly. For example he spelled tjurunga ‘sacred object’ as churiña, using ñ as in Spanish ‘Señor’, substituting the palatal for the velar nasal. The spelling conventions of Spencer (1927) are even less international than those of the volume which he edited (Stirling 1896), relating sounds only to English sounds as exemplified in English words. As a result, and in combination with the incorrect translations of some items, many of the pronunciations of the 640 words in Spencer’s (1927) wordlist are not recoverable from the form of the word. It was not only ‘the passage of time since their fieldwork’ which Wilkins and Petch (1997:487) claim led to ‘the sometimes substantially different spellings’ between Spencer’s earlier work and Spencer (1927) but his unfamiliarity with the language.

14. Conclusion

Uniform orthographies were functional means of communication thanks to their internal consistency and transparency. It is more likely that words were transcribed accurately with a uniform orthography than with non-uniform spelling. Dawes used a uniform orthography in writing the words of Dharuk in the eighteenth century not long after Jones’ Anniversary Discourse. The origin of the RGS orthography was not in 1885 as Thomas (2007:162) claims, but half a century earlier. The RGS orthography was among the most consistent ways of representing sounds before the IPA was applied to Australian languages, enabling English-speaking researchers to transcend some of the inconsistencies of irregular spelling. The Standard Alphabet was a universal alphabet, but failed as a practical writing system. The RGS, Standard Alphabet and various missionary orthographies all preceded the implementation of the IPA which arose initially from the needs of language teachers and not as a universal alphabet. Knowledge of the uniform orthographies is useful for understanding the work of early linguistic researchers.
However, their use presupposes a level of language awareness which was often lacking in the frontier Australian communities of the nineteenth century and is still lacking in Australian society. Then, as now, there were those who wrote Aboriginal words inconsistently according to the conventions of their own language. It is fortunate for language documentation and language revival that many Aboriginal languages were written using uniform orthographies. The extent to which the researchers recorded sounds accurately according to the conventions set out in uniform orthographies must be answered in individual cases. Further research is needed to determine how successfully early linguistic researchers applied them to particular Australian languages.

 References


Dawes, William. The Notebooks of William Dawes on the Aboriginal Language of Sydney.

Accessed from: http://www.williamdawes.org/


Gleichen, Edward (1921). The Permanent Committee on Geographical Names. *The Geographical
Journal 57, 36-43.


Norgate.


Lhotsky, John (1839). Some Remarks on a Short Vocabulary of the Natives of Van Diemen Land; And Also of the Menero Downs in Australia. *Journal of the Royal Geographical Society of London* (9), 157-162.

Lyon, Robert Menli (1833). A glance at the manners and language of the aboriginal inhabitants of Western Australia with a short vocabulary. *Perth Gazette and Western Australian Journal*, 51-64.


Moore, George Fletcher (1842). *A descriptive vocabulary of the language in common use*
amongst the natives of Western Australia. London: W.S. Orr & Co.


Nind, Scott (1831). Description of the natives of King George Sound (Swan River Colony) and adjoining country. Journal of the Royal Geographical Society of London 1, 21-51.


The Mission Orthography in Carl Strehlow’s Dictionary

David Moore

1 Introduction

This chapter provides an analysis of the orthography used for Aranda in the Carl Strehlow dictionary, and places this system in its historical context. Readers who are primarily interested in the immediate issues of pronouncing the Aranda words from their spelling in this dictionary should consult the separate Pronunciation Guides provided at the front of the dictionary in this book. Readers who wish to learn to use the current spelling of Aranda words should consult the modern dictionaries and other resources.

The first Arandic orthography for practical use emerged with the establishment of the Hermannsburg Mission in central Australia in 1877 and the subsequent codification of the language in a range of written materials. The name of the language came to be written as ‘Aranda’ at that time, and this convention is followed throughout this chapter. The orthography, which I shall call the ‘Mission Orthography’, evolved over time and endured for around a century as a means of written communication for speakers of the Western Aranda language. The Mission Orthography was phonetic in character and was subject to the limitations of that type of orthography. It was finally replaced in the 1970s by basically phonemic orthographies, the type currently used for writing all the languages of Central Australia. The two modern orthographies for the Western Aranda dialect are called here the Finke River Mission (FRM) orthography and the Institute for Aboriginal Development (IAD) orthography (which follows the Common Arandic approach). The

185 With contributions, and editing, by John Henderson.

186 Using the names of these institutions is just one way that the two orthographies are labelled. There is of course a more detailed history of the people, places and institutions involved. See below, and Breen (2001, 2005).
language name is written *Arrarnta* in the FRM orthography and *Arrernte* in the IAD orthography. This chapter does not seek to address all the issues involved in community, institutional and individual choices between these two modern Western Aranda orthographies. See Breen (2005) and Kenny (forthcoming) for discussion of some of the relevant issues. Kral (2000) discusses the use of literacy in the Western Aranda community.

The Mission Orthography was developed as a practical orthography for use in the Lutheran Western Aranda community, and was used in educational and religious works, a scholarly grammar and dictionary, and in personal correspondence. It was a regular orthography in that it attempted to consistently represent the sounds of Aranda, at least as they were perceived by the missionaries.

In contrast, some other early attempts to write Aranda words were basically ad hoc spellings of each word. In most cases, they were almost certainly intended to give only a rough indication of the pronunciation of just a few words rather than to establish a spelling system for extended writing for a range of purposes. Willshire (1891), and some others, made short wordlists with just a few items, without regular spelling across the words in the list. For example, Willshire gives ‘Quasha Un-jew-ma’ for what is written as *kwatja ntjuma* ‘drink water’ in the modern FRM orthography. This example illustrates some common properties of ad hoc spellings of the era. Firstly, these spellings were often based on hearing the words as sounds of English and applying the English orthography. Secondly, a given sound may be represented differently in different words: Willshire’s <sh> in his ‘Quasha’ and his <j> in ‘Un-jew-ma’ actually represent the same sound (consistently represented by <tj> in the FRM orthography). Thirdly, ad hoc spellings sometimes relied on the spelling of specific English words, such as *Jew* here. Given that the English orthography is moderately irregular, with complex relationships between
sounds and letters, the result is a highly irregular system of spelling Aranda words. Finally, hyphens are often used in an unsystematic way to try to compensate for the inconsistency of the relationships between letters and sounds.

The remainder of this chapter examines the details of the letter-sound correspondences for consonants and vowels in the Mission Orthography, and the subsequent development of the later phonemic orthographies. Some technical linguistic terms and symbols are necessary for the discussion but are introduced in a way that will hopefully be useful for a broader readership.

### 2 Orthography

Developing a practical orthography, or evaluating one, is a complex matter which involves taking into account the sounds and structure of the language in question, levels of bilingualism in the community, literacy skills in other languages, the functions of literacy in the language, community perceptions of existing or earlier orthographies of the language, social identity, power relations within a community, and other factors. Before considering the details of the Mission Orthography, it is useful to review some concepts which are important to understanding the sound systems of languages and the nature of writing systems. Readers who are familiar with these areas could skip to the next section.

A practical orthography is generally intended as a conventional writing system for everyday community use, that is, where people broadly agree to write the words of a language in the same way. It is a standard which allows individuals to communicate with each other in writing. In general, a practical orthography also aims to be regular or uniform, that is, to be consistent across a language by writing each word of the language according to general principles established for that language. As Gudschinsky (1973: 124) puts it, ‘one cannot make an arbitrary decision [on spelling] for each word’.
For regular alphabetic orthographies, the general principles need to specify the relationships between individual sounds and letters. These are often summarised in a general pronunciation key of the kind found in bilingual dictionaries, grammars and language learning materials, as opposed to having to indicate the pronunciation of each word separately. Some alphabetic orthographies are highly regular in that the relationships between sounds and symbols are essentially one-to-one, that is, each letter (or specific combination of letters) represents a single sound, and each sound is represented by a single letter (or specific combination of letters). The more regular an orthography is, the simpler its pronunciation key. If an alphabetic orthography is not very regular, it will not be straightforward to accurately pronounce a word from its spelling, or to accurately write the word from its pronunciation. Users of the orthography then just have to learn the idiosyncratic spelling of each word.

Establishing a regular alphabetic orthography requires identifying the sounds in all the known words of the language before any decisions can be made about how letters can be assigned to these sounds. In contrast, an ad hoc spelling of a word is typically produced without considering what sounds need to be represented in words overall, and without considering the overall regularity of the orthography. An ad hoc spelling may seem simplest for a limited purpose – just a few words, perhaps a name, or for a sign – but it does not take into account the broader issues in the learning and development of literacy in a community. Such inconsistent spellings may make it harder for people other than the writer – the community as a whole – to read the word in that specific use. They may also make it harder to learn to read and write in the language because they reduce the regularity of the orthography. Of course, a degree of irregularity is not a fatal weakness in an orthography, as the English orthography demonstrates, but it does affect the difficulty
of learning to read and write in the language, especially for a minority language with limited resources.

2.1 Sounds and graphemes

The symbols of an orthography are graphemes, and in an alphabetic orthography, these are the letters or specific combinations of letters (and accent marks etc.) which represent the sounds of the language. A standard convention in discussing orthography is to use bracketing notation to distinguish different uses of symbols. Graphemes are represented in angle brackets, for example <sh> in the English orthography, in order to distinguish between the graphemes and the sounds they represent. This bracketing also distinguishes orthographic representation from the use of symbols for other purposes, such as phonetic transcription using the International Phonetic Alphabet (IPA) which is indicated by square brackets, and in which [sh] represents a sequence of two sounds.

At this stage, it is necessary to recognise that the term ‘sound’ in language actually covers two quite distinct concepts, phone and phoneme. Phonetics considers a sound for its objective physical properties, including how it is articulated by the organs of speech. The term ‘phone’ is used for a sound in this sense. The physical properties of an individual phone can be described, and can then be represented in transcription by the symbols of the IPA. In that function the IPA symbols are therefore a kind of shorthand for a description of those particular physical properties. For example, [n] represents a phone that is voiced, a nasal, and produced with the tip of the tongue in contact above the upper teeth. The phone [n] occurs in English, Aranda and many other languages. Phonetic transcription represents the physical events of actual speech, but it can be broad(er) or narrow(er) depending on how precise or detailed the description is intended to be. A phonetic transcription may be narrow or precise enough to represent small differences in
the way a single individual pronounces the same word on different occasions. A broad(er) transcription represents only larger phonetic differences.

Phonetic transcription identifies individual phones, but beyond this there is the question of how a language uses its phones to constitute its vocabulary. A central fact in this regard is the way that words of the vocabulary are differentiated by particular phonetic differences in a language. For example, in Aranda there are two phones, represented phonetically as [n] and [ŋ] (a diacritic added below plain n). The phone [n] is as described above, while [ŋ] is a different phone, a dental nasal, that is produced with the tongue against the back of the upper teeth. The difference between these two phones is used in Aranda to differentiate words of the vocabulary, for example [namə] ‘sit, be’ vs [ŋamə] ‘to rain, to wet (something)’. (These words are written in the FRM orthography as nama and nhama, respectively.) The difference between [n] and [ŋ] is significant in Aranda because it can be the only difference in pronunciation between a pair of words, and is therefore crucial to correctly distinguishing words and their meanings in speech. The difference is said to be contrastive in Aranda.

The same two phones, [n] and dental [ŋ], also occur in the pronunciation of English words. For example, ‘ten’ is typically pronounced [ten] whereas dental [ŋ] occurs before the dental [θ] in a pronunciation of words like ‘tenth’, [teŋθ] (Cox 2012: 137). Although these two phones occur in both English and Aranda, they are used very differently in English. Unlike Aranda, there are no English words that are differentiated just by this phonetic difference between [n] and [ŋ]. This is never the only difference between words of English vocabulary. This means that in English the difference between [n] and [ŋ] is not significant for speakers to differentiate distinct words. The difference is not contrastive in English.
This fact about English can be expressed by recognising [n] and [ɲ] as minor variations of the same ‘sound’ in a special sense. This is expressed in technical terms by saying that [n] and [ɲ] are allophones (or members) of the same phoneme in English. Bracketing notation uses slash brackets to indicate when an IPA symbol is being used to label a phoneme. Thus the English phoneme /n/ has the allophones [n] and [ɲ] (and others). In Aranda, the fact that the difference between [n] and [ɲ] differentiates words is expressed by recognising distinct phonemes, which can be labelled /n/ and /ɲ/. In this way, the phoneme concept represents not just what phones occur in a language, but which differences between phones differentiate words of the vocabulary of the language. The way that speakers conceive of the sounds of their language tends to correspond to the phonemes that can be analysed from the phonetic facts of word pronunciation. For example, speakers of English are generally not aware that they are producing different phones [n] and [ɲ] in words like ‘ten’ and ‘tenth’, and generally recognise these distinct phones as instances of the same sound in some sense. In contrast, speakers of Aranda are quite conscious of the sound difference between words like [nəmə] ‘sit, be’ vs [ɲəmə] ‘rain, to wet (something)’. However, speakers’ sense of the distinctness or sameness of sounds is not always exactly the same thing as determining what the phonemes of the language are, and needs to be considered separately in developing an orthography. Analysis of the phonemes of a language allows the words of the vocabulary to be represented in terms of the phonemes in the word. For example, /ænθɹəpɔlədʒi/ is a phonemic representation of the word ‘anthropology’ in Australian English. Note that this includes the phoneme symbol /n/, by which there is no indication of the actual detail of pronunciation as dental [ɲ] in this context. Speakers unconsciously know that the phoneme /n/ can be realised as the dental phone [ɲ] in such words because of the following dental sound /θ/. Such phonetic differences which do not play a role in
differentiating words in the language are effectively suppressed in a phonemic transcription. Of course, the concepts introduced in the discussion here are relevant to all the consonant and vowels phones of a language: we have only focussed on [n] and [ŋ] as an example.

In a phonemic orthography, the basic principle is that each grapheme represents a phoneme, which is sufficient information for speakers of a language to match spelling to pronunciation to identify a word. However, there are also additional factors that can play a role in designing a phonemic orthography, and as a result there is often not always a perfect correspondence between graphemes and phonemes.

These concepts can now be applied to consider the Mission Orthography and subsequent phonemic orthographies.

3 The Mission Orthography: Phonetic, uniform and continental

The Mission Orthography was developed by Hermannsburg missionaries so that they could translate the Bible and other materials into the local languages (Moore and Ríos Castaño, 2018). It followed the ‘continental’ spelling system, according to Carl Strehlow (Kenny 2013: 98), and was an attempt at a uniform orthography. This was clearly a considered and systematic approach to developing a practical orthography for community use, in contrast to the ad hoc approach of authors such as Willshire, as discussed above.

The ‘continental’ approach categorises the simple vowel phones with the letters <a>, <e>, <i>, <o> and <u>. In general terms, this simple approach offers at least the potential for greater consistency in spelling than trying to categorise the vowels of Aranda according to the many distinct vowel sounds distinguished in English orthography. The options for uniform orthographies available to linguistic and other fieldworkers in central Australia in the late 1800s and early 1900s are discussed in Moore (2013). Edward Stirling, for example, used the Royal Geographical System in the 1896 Report on the work of the
The science of phonetics was developing at that time, and this was reflected in the evolving approaches to developing orthographies.

The Mission Orthography was founded in the system used by Pastor Hermann Kempe, and summarised in his phonetic key (1891a: 2). By the time Carl Strehlow was compiling the dictionary, the Mission Orthography was already used in teaching at the Hermannsburg school and in religious services. Primers, a worship book (Kempe 1891b), a grammar and vocabulary (Kempe 1891a) had already been published using it. Strehlow largely followed Kempe’s approach, but made some modifications. Oberscheidt (1991: iii) considers that Strehlow ‘continued to employ the basic form of the first orthography, creating a kind of orthographic continuity’. John Strehlow (2011: 739) adds, from a different point of view, that ‘[Carl Strehlow] did not attempt to modify the problematic spelling used by Kempe’. Strehlow (1908) clarified some points about the Mission Orthography, but did not produce any further explicit discussion of Aranda phonetics or orthography.

Some of the differences in Strehlow’s spelling reflect his greater ability to discriminate between sounds than his predecessor’s. Some other differences can be attributed to dialect variation, as Kempe and Strehlow consulted different speakers who appear to have pronounced some words differently. According to Kempe (1891a: 1–2), ‘The vocabulary is that of the tribe inhabiting the River Finke, and is also, with only slight variations in the dialect, that of the tribes in the MacDonnell Ranges eastward to Alice Springs, but not far westward of the River Finke, and extending southward to the Peake’. Strehlow focussed on what he saw as a different dialect, ‘to use Aranda aratja\textsuperscript{187} forms spoken by most of the people on the Station in place of the Aranda ulbma used by Kempe’ (J. Strehlow

\textsuperscript{187} Carl Strehlow glosses aratja as ‘straight, upright, just’ and ulbma as ‘tight, narrow’.
For other words, Strehlow specifies the particular dialect. In Kempe’s list there are a number of words that appear to be from dialects away from the immediate Hermannsburg area, but are not annotated as such. In some cases, these differences between dialect forms involve an initial vowel. For example, Kempe gives *auuma* ‘hear’, with an initial vowel, whereas Strehlow gives *wuma* without an initial vowel, and attributes *aūma* to a Northern dialect.

### 4 Analysis of the Mission Orthography

This section examines Kempe’s orthography and its development in Strehlow’s work. The Mission Orthography was a broad phonetic representation, rather than phonemic, in that it did not specifically attempt to represent only those phonetic differences which are significant in Aranda because they differentiate words. The Mission Orthography makes some sound distinctions which are not significant in Aranda, and does not represent some distinctions which are significant. There are three factors to consider in this. Firstly, there is the question of which phonetic distinctions Kempe and Strehlow were able to discriminate, and whether they could discriminate them reliably in different words. To a large degree this can only be assessed against the fact that all the evidence indicates that the individual sounds of Aranda have not changed significantly since Kempe’s time, though some individual words may have changed in their pronunciation over that time. There is evidence that the Hermannsburg missionaries modified the orthography as their ability to discriminate sounds improved. Secondly, there is the question as to whether there are phonetic distinctions which they were able to discriminate, but chose not to represent in the orthography in consideration of other factors. There is unfortunately relatively little recorded information on this point. However, there is some evidence that he was in general conscious of the separate tasks in discriminating the sounds of the language and choosing letters to represent them: ‘to make the number of written
characters as few as possible, [a long vowel] is indicated by a small stroke over the letter, as [in] läda ['point']’ (1891a: 2). Thirdly, even where the orthography makes a distinction between sounds, there is the question of whether it is consistently applied in the spelling of individual words, both in Kempe’s and Strehlow’s dictionaries and in their other works. Kempe’s representation of long vowels, discussed below, is such a case. In addition to these three factors, there is also the usual possibility of an accidental error in writing a word.

Kempe’s phonetic key distinguishes 15 consonant graphemes, six simple vowel graphemes (and vowel length) and three diphthong graphemes. He characterises the sounds these represent by making comparisons to specific English spellings in example words, and therefore indirectly compares them to phonemes of English. This is of course appropriate for a grammar and vocabulary published in English. There is evidence of influence from both English and Kempe’s and Strehlow’s native German in the discrimination of individual phones, in the choice of letters to represent them, and in the choice of the comparison examples in English.

4.1 Consonants

The basic phonetic representation of consonant sounds in the Mission Orthography is shown in Table 1, with its correspondence to Aranda phonemes and the modern phonemic orthographies. The following sections provide more detailed discussion of other specific aspects of the representation, including consonant doubling. This table deals only with consonant phones as they occur singly in words: specific sequences of consonant phones in words are discussed later.

The first column in Table 1 gives a representation of the basic consonant phonemes using IPA symbols. This follows the phonemic analysis of consonants by Breen (2001) and Wilkins (1989). The table then indicates the representation of each phoneme in the FRM
and IAD orthographies, which differ here in only a couple of respects. The orthographies in Kempe (1891a) and the Carl Strehlow Dictionary are listed separately because there is a small number of differences between them. The way that the correspondences between the three orthographies are represented in Table 1 can be understood from the following example. The Mission Orthography (i) does not make the important distinction between the phonemes written as <t>, <th> and <rt> in the modern orthographies, and (ii) it does make a distinction between <t> and <d> which is not significant in Aranda because the difference between [t] and [d] does not differentiate words.

Table 1. Basic consonant phonemes and their orthographic representations.

<table>
<thead>
<tr>
<th>Phonemes (IPA)</th>
<th>FRM &amp; IAD</th>
<th>Mission Orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>C Strehlow</td>
</tr>
<tr>
<td>/p/</td>
<td>&lt;p&gt;</td>
<td>&lt;p&gt;, &lt;b&gt;</td>
</tr>
<tr>
<td>/k/</td>
<td>&lt;k&gt;</td>
<td>&lt;k&gt;, &lt;g&gt;</td>
</tr>
<tr>
<td>/t/</td>
<td>&lt;t&gt;</td>
<td>&lt;t&gt;, &lt;d&gt;</td>
</tr>
<tr>
<td>/ʈ/</td>
<td>&lt;th&gt;</td>
<td>&lt;t&gt;, &lt;d&gt;</td>
</tr>
<tr>
<td>/l/</td>
<td>&lt;l&gt;</td>
<td>&lt;l&gt;</td>
</tr>
<tr>
<td>/ʎ/</td>
<td>&lt;lh&gt;</td>
<td>&lt;l&gt;</td>
</tr>
</tbody>
</table>
In Kempe’s phonetic key, he describes 15 consonant graphemes, shown in Table 2, as representing ‘primitive’ sounds of Aranda, that is, the original sounds of Aranda as

<table>
<thead>
<tr>
<th>Consonant</th>
<th>Grapheme</th>
<th>Representation</th>
<th>Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>/m/</td>
<td>&lt;m&gt;</td>
<td>&lt;m&gt;</td>
<td>&lt;m&gt;</td>
</tr>
<tr>
<td>/ɲ/</td>
<td>&lt;ny&gt;</td>
<td>&lt;nj&gt;</td>
<td>&lt;nj&gt;</td>
</tr>
<tr>
<td>/n/</td>
<td>&lt;n&gt;</td>
<td>&lt;n&gt;</td>
<td>&lt;n&gt;</td>
</tr>
<tr>
<td>/ŋ/</td>
<td>&lt;nh&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ɾ/</td>
<td>&lt;rn&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ŋ̪/</td>
<td>&lt;nh&gt;</td>
<td>&lt;nj&gt;</td>
<td>&lt;nj&gt;</td>
</tr>
<tr>
<td>/ɾ̪/</td>
<td>&lt;nr&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ɾ̹/</td>
<td>&lt;h&gt; (IAD)</td>
<td>&lt;i&gt;</td>
<td></td>
</tr>
<tr>
<td>/p̓m/</td>
<td>&lt;pm&gt;</td>
<td>&lt;tm&gt;</td>
<td>&lt;tm&gt;</td>
</tr>
<tr>
<td>/t̓n/</td>
<td>&lt;tn&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/t̓ŋ/</td>
<td>&lt;thn&gt;</td>
<td>&lt;tn&gt;, &lt;dn&gt;</td>
<td>&lt;tn&gt;, &lt;dn&gt;</td>
</tr>
<tr>
<td>/t̓ɾ/</td>
<td>&lt;rtn&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/t̓n̪/</td>
<td>&lt;tny&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/kn̪/</td>
<td>&lt;tng&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/kŋ/</td>
<td>&lt;kng&gt;</td>
<td></td>
<td>&lt;gn&gt;</td>
</tr>
<tr>
<td>/w/</td>
<td>&lt;w&gt;</td>
<td>&lt;w&gt;, &lt;u&gt;, &lt;o&gt;</td>
<td>&lt;w&gt;, &lt;u&gt;, &lt;o&gt;</td>
</tr>
</tbody>
</table>
opposed to the additional letters <f>, <s> and <z> used to represent sounds in biblical names.

**Table 2. Consonant graphemes in Kempe (1891a)**

<table>
<thead>
<tr>
<th>Consonant Grapheme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘B b, like b in be’</td>
<td>‘N n, like n in near’</td>
</tr>
<tr>
<td>‘D d, like d in do’</td>
<td>‘Ng ng, like ng in ring’</td>
</tr>
<tr>
<td>‘G g, like g in go’</td>
<td>‘P p, like p in pipe’</td>
</tr>
<tr>
<td>‘H h, like h in here’</td>
<td>‘R r, like r in roam’</td>
</tr>
<tr>
<td>‘J j, like y in year’</td>
<td>‘T t, like t in to’</td>
</tr>
<tr>
<td>‘K k, like k in king’</td>
<td>‘Tj tj, like g in gentle’</td>
</tr>
<tr>
<td>‘L l, like l in long’</td>
<td>‘W w, like w in wife’</td>
</tr>
<tr>
<td>‘M m, like m in more’</td>
<td></td>
</tr>
</tbody>
</table>

Most of the stop consonants are over-differentiated with respect to the phonetic property of voicing: <b> vs <p>, <d> vs <t>, and <g> vs <k>. In each of these pairs, the sounds are contrastive in German and English, that is they differentiate words, for example as demonstrated by *bush vs push, do vs to*, and *kill vs gill*. However, these pairs of phones are not contrastive in Aranda, in that there are no such pairs of words where the only difference in pronunciation is the difference between [b] vs [p] etc. It was therefore not necessary to distinguish them in the orthography. This type of over-differentiation is not necessarily a significant issue in an orthography provided that speakers of the language can consistently discriminate such non-contrastive sounds. However, this is often not the case, as noted above for [n] and [ŋ] in English. Where two phones, such as [b] and [p], are frequently interchangeable within some words, this raises issues for a phonetic approach such as the Mission Orthography. It would result in multiple spellings of a single word according to the phonetic facts of each occasion of a speaker pronouncing that word. This occurs (perhaps accidentally) where Kempe has two distinct vocabulary entries for what
appears to be the same word: *damiba* ‘loose, breakable’ and *tamba* ‘loose, shaking, perishable, fading’. The alternative is to make an arbitrary decision on which letter to use on a word-by-word basis, and to fix that as the idiosyncratic spelling of that word regardless of how it is actually pronounced on any given occasion. Kempe and Strehlow have in fact done this in many cases, for example with *[b]* and *[p]* in *banama* ‘to build, to paint’ vs *parama* ‘to stop, to bar’, where there is not a consistent difference in the first sound. The same applies in numerous words for *[t]* vs *[d]* and *[k]* vs *[g]*. The effect is that the spelling of individual words is more idiosyncratic, and the orthography overall is less regular.

The *<h>* in Kempe’s phonetic key is unnecessary: it does not represent a contrastive sound in Aranda, and in fact does not appear in any of the words in his wordlist. Strehlow (1908: 698) states explicitly that he does not know the ‘consonant h’ in Aranda, meaning the initial sound in an English word like ‘here’.

Kempe’s key clearly recognises that the velar nasal *[n]* occurs in Aranda and represents it as *<ng>*. However, this phoneme is represented quite variably in his writings, in part because the ability to discriminate a specific sound can depend on the position it occurs in within a word. In his grammar and vocabulary (1891a), Kempe consistently discriminates the velar nasal when it is the first sound in a word, for example in *ngapa* ‘crow’. But his worship book (1891b) shows this phone being represented as *<n>* at the beginning of words. Compare:

\[Etna\, najila\] ‘they are hungry’ (Kempe 1891b: 12)

\[Etna\, ngaiala\, \text{[ditto]}\] (Strehlow 1904: 14)

It would appear that Kempe’s ability to discriminate the velar nasal in this position developed over time, but the initial variability on this point can be attributed to the influence of German and English. The velar nasal also occurs in both German and
English, however, in these languages the velar nasal does not occur as the first sound in a word, and speakers of these languages tend initially to have difficulty in both recognising and pronouncing it in this position. The influence of German or English though is clearly not the same for everyone in this regard: the same issue with the velar nasal had earlier been encountered by the Dieri mission at Killalpannina but it was nonetheless written consistently by Missionary Flierl.

Kempe and Strehlow also use <n> for a velar nasal in two other contexts where the key would mandate <ng>: before or after <k>. They use <kn> or <gn> for the sequence of these two consonant phones in for example wolkna ‘grave’, instead of <kng>, and they use <nk> where the key would have <ngk>, for example in inka ‘foot’. It is not clear whether these reflect an inability to recognise the velar nasal in these contexts, or reflect influence from English or German spellings such as in drink/trinken, or reflect a considered spelling ‘shortcut’. It could possibly be such a shortcut because Kempe seems to have been prepared to consider the number of letters required for a spelling, as suggested by his discussion of vowel length (1891a: 2), mentioned above. Further, Kempe’s and Strehlow’s use of <nk> for /ŋk/ in words like inka ‘foot’ does not distinguish /ŋk/ from the distinct sequence of alveolar nasal plus velar stop /nk/ in words like imanka ‘long ago’.

Kempe’s use of <r> is a complicated case. He uses it to represent three distinct phonemes of Aranda: the retroflex approximant /ɻ/, the alveolar tap/trill /ɾ/ and the back approximant /ɰ/ (discussed below). These phonemes are all represented in distinct ways in the modern orthographies, as Table 1 shows.

4.1.1 Doubled consonant letters

Both Kempe and Strehlow use double consonant letters in some words, but this does not appear to be consistent. In some cases, it appears to be an attempt to distinguish different
phonetic properties, but it is not clear which phonetic properties. Aranda distinguishes dental, alveolar, post-alveolar (retroflex) and palatal places of articulation. Thus there are four lateral phonemes represented by <lh>, <l>, <rl> and <ly> respectively in the modern orthographies. There are four corresponding stops and four corresponding nasals at these places of articulation. Kempe’s phonetic key significantly under-differentiates all these consonants in their place of articulation. Thus his <l> represents all of the four distinct phonemes represented in the modern orthographies as <lh>, <l>, <rl> and <ly> (which he also represents as <lj>). In English and German there is of course only one lateral phoneme, at the alveolar place of articulation, and it is common for speakers of these languages to have difficulty discriminating the other distinct lateral phonemes in Aranda: they tend to hear them all as alveolar /l/. Doubling of consonant letters in Kempe’s and Strehlow’s work seems to indicate a non-alveolar place of articulation without specifying which one, at least for the nasals. Kempe’s vocabulary has an instance, *mballa* ‘heat’, where doubled <ll> represents a dental lateral (<lh> in the modern orthographies). In Strehlow’s dictionary <ll> is not common but those that do occur are split relatively evenly between alveolar, retroflex and dental laterals. The tendency seems clearer with doubling of <n> in Strehlow’s dictionary: the instances of <nn> there all seem to be retroflex or dental nasals, as opposed to alveolar and palatal.

The letter-doubling strategy also extends to some instances of <rr>. Kempe uses it in one case to distinguish two words, *garra* ‘clay-ground’ vs *gara* ‘meat’ where the former has the alveolar tap/trill /ɾ/ and the latter has the retroflex approximant /ɻ/. Strehlow’s dictionary has many instances of <rr> vs <r> but there is no real consistency: both options represent the alveolar tap/trill /ɾ/ and the retroflex approximant /ɻ/ in different words. The modern orthographies both consistently represent the alveolar tap/trill as <rr> and the retroflex approximant as <r>.
4.1.2  Palatal sounds

The palatal\textsuperscript{188} sounds are not consistently represented in the Mission Orthography. Kempe’s phonetic key only has $<$tj$>$ for the palatal stop, and he thus appears to take the palatal nasal and lateral as a sequence of $<$n$>$ or $<$l$>$ respectively followed by $<$j$>$. This in itself presents no particular issue for the orthography.\textsuperscript{189} More importantly, as noted in the previous section, both Kempe and Strehlow are inconsistent in distinguishing the palatal nasal and lateral from their alveolar counterparts, particularly at the beginning of words: they are written as $<$n$>$ and $<$l$>$ respectively in many cases. For example $ninta$ ‘one’ (FRM $nyinta$). In the Luritja words in the dictionary Strehlow takes a different approach, drawing on the Spanish use of a tilde above $<$n$>$, for example $ngalatarbáñi$ ‘hereinkommen, come into’. He presumably does not use the tilde in Aranda words because the spelling system for Aranda had already become established in use.

Kempe and Strehlow clearly use $<$nj$>$ to represent two distinct things, (i) a single palatal nasal $/ɨɲ/$ and (ii) a sequence of a palatal nasal followed by a palatal stop $/ɲc/$, although they both also use $<$ntj$>$ for the latter in other words. It is also possible that in some cases their $<$nj$>$ represents a sequence of an alveolar nasal followed by a palatal stop $/nc/$, since this is known to occur in Arandic dialects. Thus it is not clear how to read $<$nj$>$ in a given word. For example, Strehlow’s $<$nj$>$ in both $njuma$ ‘drink’ (FRM $ntjuma$) and $itinja$ ‘near’ vs $itintja$ ‘branch’ (FRM $etinya$ vs $etintja$).

4.1.3  The velar approximant

There is also variability in the representation of the voiced ‘unrounded back approximant $/wɨ/$ articulated in the velar and uvular regions’ (Henderson 2013: 20–21), a phoneme with...

\textsuperscript{188} These are better characterised as alveopalatal but the more general term is sufficient here.

\textsuperscript{189} In fact T.G.H. Strehlow (1944: 14) later analysed all the palatals in this way as consonant clusters: ‘$j$ is very frequently met with as the final element of the consonant combinations $lj, nj, tj, nj, nj$’.
approximant and weak fricative allophones. This is one of the phonemes that Kempe represented with \(<r>\), for example \(ara\) ‘wrath’ (Kempe 1891a: 38). This Aranda phoneme is similar to \(/t/\) phonemes in many modern varieties of French (Henderson and Dobson 1994: 22) and allophones of \(/t/\) in German (Moulton 1970: 35) and it is therefore not at all surprising that German speakers represented this Aranda phoneme as \(<r>\). Strehlow (1908: 699) describes its pronunciation and its representation in his work as follows:

Den Konsonanten \(h\) kenne ich im Wonkaranda nicht, dagegen kommt ein gutturales \(r\) vor, das ich im Unterschied zum gewöhnlichen \(r\) mit einem Spiritus asper versehe (\(r\)). Es erfordert für den Weissen einige Übung, diesen Laut hervorzubringen; man versuche den Laut \(ch\) (wie in ach!) mit dem sanften, nicht rollenden \(r\) zu verbinden; z. B. \(rarka\) zu sprechen \(rcharka\).

I do not know of the consonant \(h\) in Wonkaranda, however there is a guttural \(r\), which in contrast to the usual \(r\), I give with the Spiritus asper ‘. For a white person it takes practice to produce this sound. One attempts to make the \(ch\) sound (as in ach!) combined with a soft and non-rolled \(r\), for example to pronounce \(rarka\) as \(rcharka\).

The \textit{spiritus asper}, a Latin translation of ‘rough breathing’, is a symbol \(<\acute{\iota}>\) which appears in Greek linguistic tradition to indicate \(/h/\), the glottal fricative. The Aranda velar approximant was later represented as \(<r>\) by T.G.H. Strehlow (1944). In the dictionary, Carl Strehlow also recognises the velar approximant as a distinctive sound in another way, by giving it a distinct place in the alphabetical order, placing the 44 entries after the entries starting with plain \(<r>\). The velar approximant has been gradually lost from
Western Aranda speech, and is not represented at all in the modern FRM orthography. Its loss in words has generally resulted in a long vowel sound, which Strehlow represented with a macron, as in ā ‘anger’.

4.2 Simple vowels, diphthongs and semivowels

The representation of simple vowels, diphthongs and semivowels is one of the most obvious differences between the Mission Orthography and the modern phonemic orthographies, and indeed it is the major difference between the two modern orthographies. This section examines the representation of the simple vowels first in the Mission Orthography, and then the phonemic orthographies, before discussing the diphthongs.

The vowel letters in Kempe’s (1891a: 2) phonetic key are used individually to represent simple vowel phones (and in some cases semivowels), and in combinations to represent diphthongs. They do not match closely to the phonetic distinctions that differentiate Aranda words, and thus cannot easily be correlated with a phonemic analysis of the vowels.

4.2.1 Simple vowels

Kempe’s key to simple vowels is shown in Table 3. Because the phonetic representation in the Mission Orthography is broad, these vowel letters do not represent five specific vowel phones in Aranda. In fact, it is possible to discriminate a wide range of vowel phones in Aranda words. Rather, these five vowel letters represent a categorisation of that wide range of vowel phones into five broad phonetic categories. For a vowel phone in a given word to be represented in writing, the writer has to make a decision as to which phonetic category a particular vowel phone fits into.
Table 3. Simple vowels in Kempe (1891a)

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘A a, like a in father, are’</td>
<td>‘O o, like o in more’</td>
</tr>
<tr>
<td>‘E e, like e in there, were’</td>
<td>‘U u, like u in dull, or o in more’</td>
</tr>
<tr>
<td>‘I i, like i in tin’</td>
<td></td>
</tr>
</tbody>
</table>

The categorisation of vowel phones in this way explains certain types of inconsistency in the spelling of words in the Mission Orthography. Firstly, a vowel phone in a particular word can be borderline between two or more of the five categories, and since writers are basically forced to categorise it, they may categorise the same phone differently in writing the same word on different occasions. Secondly, in any language it is normal that there is a certain amount of variability in the pronunciation of a given word, even by the same speaker. So the same word may have slightly different vowel phones in it on different occasions. These points account for some cases in Strehlow’s dictionary where there are two distinct entries for the same word, with a vowel phone represented differently, for example *ritjalama* and *ritjilama* ‘see on the go’. In just a few cases, he gives two possibilities in the same entry, for example, *irkulambetninama* or *erkulambetninama* ‘preserved’. Thirdly, there can be differences between individuals in how they categorise the same vowel phones, and therefore choose different letters to represent them. For example, Kempe’s *ewoluma* ‘to lean against’ vs Strehlow’s *iwulama* are very likely to represent basically the same pronunciation, even though three of the four vowel letters in the word are different in the two spellings. Strehlow and Kempe appear to have made different judgements of the best category for each of the vowel phones in the pronunciation of this word, even though both of them were using the set of letters in Table 3. In all of these examples, it is not that one of the spellings is necessarily an error; this variability in spelling is inherent in the way that the Mission Orthography works.
To turn now to the details of the vowels, Kempe’s account of how these letters represent the vowel sounds is rather confused. With regard to the length of the vowel sounds, he describes the simple vowel phones as short; however, the majority of the English vowels that he gives as comparisons are in fact long, at least in modern Australian English: in ‘father’, ‘are’, ‘were’ and ‘more’. This is complicated by his statement that the corresponding long vowel phones are represented by a macron diacritic over the relevant vowel letter. Kempe’s key gives only one example: lāda ‘point’ where he says that <ā> represents the long vowel as in ‘far’. This is then further complicated because, in his vocabulary, very few of the long vowel phones of Aranda are actually represented with the macron. Strehlow’s dictionary makes greater use of the macron, with all five vowel letters <ā> <ē> <ī> <ō> <ū>, but it is used infrequently and is used to represent only a relatively small proportion of long vowel phones in words. He also occasionally uses a breve diacritic to indicate a short vowel, for example <ã>.

Kempe’s <e> represents a broad phonetic category for which the two comparison vowels are as in there and were, /eɪ/ and /ɜː/ respectively in modern Australian English. Providing more than one comparison vowel is entirely consistent with the phonetic category approach since it serves to better indicate the phonetic range of the category. His treatment of <u> similarly has two comparison vowels. In fact, in his vocabulary Kempe also uses <u> to represent a vowel phone like the one in English dull in only a few words such as kumerrama ‘to rise, get up’, which Strehlow changed to kamerama. Given the spelling of words in Kempe’s vocabulary, a better comparison in the phonetic key would have been the vowel in English put (and he could also have added ‘like w in wife’ for <u>). It is also problematic that he gives the comparison vowel in more for both <u> and <o>, since this means that the same vowel phone can be represented by either letter. This is presumably because the categorisation as <o> and <u> was not a good match to the
actual vowel phones. T.G.H. Strehlow (1944: 8) similarly noted – albeit within his rather
different vowel categorisation – that ‘it becomes a matter of doubt whether to write u or o
in a given instance’.

4.2.2 Simple vowels in the FRM and IAD orthographies
The correspondence between the Mission Orthography and the phonemic orthographies is
complex with regard to vowels, and the details are more difficult to represent in a single
table than for the consonants above. Table 4 shows the representation of simple vowels in
the three orthographies. An obvious difference is that the Mission Orthography makes the
most distinctions and the IAD orthography the least. This is a consequence of the
phonetic basis of the former versus the phonemic basis of the latter. Another obvious
difference is that the FRM and IAD orthographies do not use <o>. More important though
than listing the vowel letters used in each orthography, is the fact that each orthography
uses these letters in different ways, to represent different types of categorisation of the
vowel phones that occur in the words of the language.

The basic correspondence in vowels between the FRM and IAD orthographies is given in
Table 5, leaving aside some details for the sake of an overview. The Aranda words in the
table can be taken as examples of specific vowel phones and their representation,
underlined for clarity.
Table 4. Basic vowel distinctions in the orthographies.\(^{190}\)

<table>
<thead>
<tr>
<th>Mission orthography</th>
<th>FRM orthography</th>
<th>IAD orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td>(&lt; a &gt; &lt; e &gt; &lt; i &gt; &lt; o &gt; &lt; u &gt;)</td>
<td>(&lt; a &gt; &lt; e &gt; &lt; i &gt; &lt; u &gt;)</td>
<td>(&lt; a &gt; &lt; e &gt; &lt; i &gt; &lt; u &gt;)</td>
</tr>
<tr>
<td>(&lt; ā &gt; &lt; ē &gt; &lt; ī &gt; &lt; ō &gt; &lt; ū &gt;)</td>
<td>(&lt; a &gt; &lt; ē &gt; &lt; ĵ &gt; &lt; ō &gt; )</td>
<td>(&lt; a &gt; &lt; ē &gt; &lt; ĵ &gt; &lt; ō &gt; )</td>
</tr>
</tbody>
</table>

Table 5 shows how in some cases the same phone is categorised in different ways in the two orthographies. For example, the first vowel in the Aranda words for ‘foot’ and ‘east’ are categorised differently in the FRM orthography and represented as \(<i>\) and \(<e>\) respectively, whereas they are categorised the same and both represented as \(<i>\) in the IAD orthography. Note that due to the complexity of the correspondences in the table, the details of \(<e>\) in the IAD orthography have to be split into two separate parts in the table.

Table 5. Vowel correspondences between the FRM and IAD orthographies.

<table>
<thead>
<tr>
<th>FRM orthography</th>
<th>IAD orthography</th>
<th>Phoneme and context</th>
</tr>
</thead>
<tbody>
<tr>
<td>arrua ‘rock wallaby’</td>
<td>(&lt;w&gt;) Arrwe</td>
<td>(/C^w/) rounded consonant</td>
</tr>
<tr>
<td>(\underline{ura} ‘fire’)</td>
<td>(\underline{u})</td>
<td>(/u/) in all contexts.</td>
</tr>
<tr>
<td>(\underline{purta} ‘round’)</td>
<td>(\underline{u}) purte</td>
<td>(/u/) Alternative analysis: (/ə/) before a rounded coronal consonant (/C^w/)(^{191})</td>
</tr>
</tbody>
</table>

\(^{190}\) As noted above, Kempe (1891a) also occasionally uses a breve diacritic to indicate a short vowel, for example \(<ā>\). Strehlow uses a circumflex diacritic in a few words, mostly \(<ē>\). It is not clear what this is intended to indicate but he may have been experimenting with making a particular distinction that he decided not to proceed with.

\(^{191}\) Breen (2001) offers these two analyses of the vowel in words such as these examples, depending on some specific details that are beyond the scope of this discussion.
The IAD orthography is based on Breen’s (2001) phonemic analysis of Aranda, and the aspect that most results in differences between the IAD and FRM orthographies is that in his phonemic analysis there is a phoneme /ə/ which has a wide range of allophones. This

192 Wilkins (1989) analyses the word final vowel [ə]–[ɐ] as the /ə/ phoneme. Breen’s analysis of word-final vowels is more complex. When a word is at the end of a phonological phrase this non-contrastive and quite variable final vowel is analysed as a non-phonemic vowel associated with the phonological phrase, rather than the /ə/ phoneme.
range occurs because /a/ is much influenced by the articulation of its neighbouring phonemes in a given word. The context information in Table 5 gives the general flavour of how this operates, that is, how a given phoneme is realised as the specific phone in the example words. The main factors involved are the effects of (i) a neighbouring palatal consonant, or (ii) a neighbouring rounded consonant. In relation to the latter, Breen (2001) analyses not only the consonant phonemes in Table 1 above, but also a set of corresponding consonant phonemes which can be described as rounded or labialised, and represented in IPA as /tʰ/ for example. This is pronounced with [w] if it is followed by certain vowels, including a word-final vowel. The IAD orthography represents these phonemes with the plain consonant representation plus <w>, for example <tw>.

Some of the categorisation of vowel phones in the early phonetic orthographies would appear to have been influenced by the native languages of their creators. One result is that the native German speakers Kempe and Strehlow write the language name as Aranda, while the native English speakers Spencer and Gillen write it Arunta. T.G.H. Strehlow (1944: 9) identified a back unrounded vowel [ə] which he identifies with the <u> in English cut and butter, and a German short <a> sound, as in kann and Mann. He notes that ‘English research workers regularly identify [this Aranda vowel] with their sound, whereas German writers regard it as the equivalent of their a sound’. In German orthography, <a> represents both /a/ and /ɒ/ (as in Stadt), a contrast which is not found in English (Moulton 1962: 99).

4.2.3 Diphthongs and semivowels

Kempe’s representation of the semivowels /w/ and /j/ shows parallels to both English and German. His ‘J j, like y in year’ is clearly influenced by his native German, where the similar phoneme is written <j>, rather than the corresponding <y> in English. Strehlow (1908: 699) admits that his predecessors would have done better to use <y> instead of <j>
but suggests that it was by then difficult to change since <j> was already in use in translations for the Aranda community. Conversely Kempe’s and Strehlow’s use of <w> in words like iwuna ‘what?’ shows no influence from German, where <w> represents the phoneme /v/.

Kempe recognises three diphthongs, as shown in Table 6. The letters that he chooses to represent these phones follow straightforwardly from the letters that he uses to represent the five simple vowel phones. The representation of the diphthongs happens to partially match German orthography and partially match English orthography. German has three diphthong phonemes: /aʊ/ written <au>, /ɔʏ/ written <eu> or <äu>, and /aɪ/ mostly written <ei> and <ai>. Both Kempe’s <au> and <ai> match the German orthography, although <ai> is actually a less common spelling of the German diphthong phoneme /aɪ/. His choice of <oi> does not parallel German, but it does of course parallel the English representation of the diphthong in words like coin.

Table 6. Diphthongs in Kempe (1891a)

<table>
<thead>
<tr>
<th>Diphthong</th>
<th>German Correspondence</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Ai aɪ, like i in light’</td>
<td>‘Oi oi, like oi in oil’</td>
</tr>
<tr>
<td>‘Au aʊ, like ow in now’</td>
<td></td>
</tr>
</tbody>
</table>

Strehlow (1908: 698) takes the notion of diphthong slightly differently, adding <ui> and <ua>: ‘In the Aranda language, only the following diphthongs are known to me: ai, au, oi, ui, ua. The vowels a and e, e, and a, etc., may occur side by side, but are never pronounced as diphthongs’. Kempe (1891a: 2) and Strehlow both use, albeit rather inconsistently, a diaeresis diacritic < ’ > over a vowel to mark it as distinct from the preceding vowel rather than a diphthong, for example Strehlow’s inkaïmbatja ‘footprint’ which is a compound consisting of inka ‘foot’ and imbatja ‘track’.

Most of the differences in this area within and between the Aranda orthographies depends on two related things, (i) whether a phone is taken to be a vowel or a semivowel (a vowel-
like consonant), and (ii) how the syllables within a word are distinguished. By standard
definition, a diphthong is a complex sound which can be analysed as a transition between
two vowel phones within a single phonetic syllable.

In the Mission Orthography, <ai> and <au> are the only sequences of two vowel letters
that represent true diphthongs, that is, occurring within a single syllable. Examples are
given in Table 7 below. In words such as jainama ‘send’, the diphthong is followed by a
retroflex consonant, and the pronunciation of <ai> actually varies between the diphthong
indicated by Kempe and a long [a] vowel, at least in current Western Aranda speech. The
modern orthographies treat this variation in different ways.

| Table 7. |
|---------------------|---------------------|---------------------|
| Strehlow Dictionary | FRM Orthography<sup>193</sup> | IAD Orthography |
| < ai >  | jainama ‘send’ | yairnama | yarneme |
| | inkainama ‘(to) erect’ | ingkairnama | ingkarneme |
| | Emphatic ending, e.g. lai! ‘go!’ | lhai! | lhaye! |
| < au >  | Emphatic ending, e.g. Iakitjau! | | lheketyawe! |

In a much larger number of cases, illustrated in Table 8, a sequence of two vowel letters
in the Mission Orthography represents a phonetic transition between the vowels of two
syllables. For example, Strehlow’s jia ‘story’ can be analysed as two syllables [jiːˌa]

<sup>193</sup>The absence of FRM spellings of words in this table and the following ones is simply because these
words do not appear in any available source that uses the FRM orthography.
Table 8.

<table>
<thead>
<tr>
<th></th>
<th>Strehlow Dictionary</th>
<th>FRM Orthography</th>
<th>IAD Orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; ai &gt;</td>
<td>(none)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; au &gt;</td>
<td>bāuma ‘push’</td>
<td>Pauwuma</td>
<td>paweme</td>
</tr>
<tr>
<td></td>
<td>lauma ‘hide’</td>
<td></td>
<td>laweme</td>
</tr>
<tr>
<td>&lt; ea &gt;</td>
<td>erea, iria ‘saltbush’</td>
<td></td>
<td>irreye</td>
</tr>
<tr>
<td>&lt; ia &gt;</td>
<td>jia ‘story’</td>
<td>Yia</td>
<td>Yeye</td>
</tr>
<tr>
<td>&lt; iu &gt;</td>
<td>tākiuma ‘spread out’</td>
<td>Taakiwuma</td>
<td>takiweme</td>
</tr>
<tr>
<td>&lt; oa &gt;</td>
<td>itoa ‘bush turkey’</td>
<td>Itua</td>
<td>tertiwe</td>
</tr>
<tr>
<td></td>
<td>nóa ‘spouse’</td>
<td>Nua</td>
<td>newe</td>
</tr>
<tr>
<td>&lt; oe &gt;</td>
<td>ntoērama ‘vomit’</td>
<td></td>
<td>ntewirreme</td>
</tr>
<tr>
<td>&lt; oi &gt;</td>
<td>boilama ‘blow’</td>
<td></td>
<td>pewileme</td>
</tr>
<tr>
<td>&lt; ou &gt;</td>
<td>erouma ‘shake’</td>
<td>Rruwuma</td>
<td>rreweme</td>
</tr>
<tr>
<td>&lt; ui &gt;</td>
<td>ruilkara ‘bird sp.’</td>
<td></td>
<td>rrewirlkere</td>
</tr>
</tbody>
</table>

In the type above, the IAD orthography, and to some extent the FRM orthography, show a
different analysis of phonetic transition between the vowels of two syllables: a semivowel
/w/ or /j/ is taken to occur between the two vowels. For example, where Strehlow has
<au> in bauma ‘push’, the IAD orthography has <awe> in paweme. In this case, the FRM
orthography combines both strategies, the sequence <au> plus the semivowel represented
as <w>, pauwuma. An alternative strategy that is similar to this is also used in some
words in the Mission Orthography: the transition between the vowels of two syllables is
represented by three vowel letters, as illustrated in Table 9. German orthography also uses
the same general strategy, for example in words like *feiern* /ˈfaiən/ ‘celebrate’ or *misstrauische* /ˈmistraʊf/ ‘mistrustful’.

Table 9.

<table>
<thead>
<tr>
<th>Strehlow Dictionary</th>
<th>FRM Orthography</th>
<th>IAD Orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; aia &gt;</td>
<td>taia ‘moon’</td>
<td>Taiya</td>
</tr>
<tr>
<td>&lt; aie &gt;</td>
<td>irkaierama ‘fade’</td>
<td></td>
</tr>
<tr>
<td>&lt; aii &gt;</td>
<td>irkaĩĩkaia ‘faint’</td>
<td></td>
</tr>
<tr>
<td>&lt; aua &gt;</td>
<td>taua ‘bag’</td>
<td>Thauwa</td>
</tr>
<tr>
<td></td>
<td>raualelama ‘scatter’</td>
<td></td>
</tr>
<tr>
<td>&lt; aue &gt;</td>
<td>rauerama ‘disperse’</td>
<td></td>
</tr>
<tr>
<td>&lt; aui &gt;</td>
<td>rauilama ‘scatter, sow’</td>
<td></td>
</tr>
<tr>
<td>&lt; eoa &gt;</td>
<td>réoa, reowa ‘entry’</td>
<td></td>
</tr>
<tr>
<td>&lt; oiu &gt;</td>
<td>ilboiuma ‘deny’</td>
<td></td>
</tr>
</tbody>
</table>

The strategy of a sequence of vowel letters is also applied to transitions between vowels over more than two syllables, for example the three syllables represented by <auia> in Strehlow’s *errauia* ‘weapons’. Compare IAD *irraweye*.

Note that Strehlow’s alternative spelling *reowa* ‘entry’ in Table 9 exemplifies a combined strategy which parallels the FRM spelling of *pauwuma* with transitional <w>. This occurs in only a couple of other words in Strehlow’s dictionary. Overall, these different strategies constitute a degree of inconsistency in the Mission Orthography.

As noted above, Strehlow (1908) also listed <ui> and <ua> as representing diphthongs. In fact his dictionary includes the range in Table 10 below. In terms of Breen’s phonemic

---

194 Much less commonly, German orthography also uses a semivowel symbol in representing such transitions, for example *Bayern* (Bavaria) /ˈbaiən/.
analysis of Aranda, these all involve the same phenomenon, a rounded consonant, written for example as /tʷ/ using IPA, represented in the IAD orthography as <tw>. This is pronounced with [w] if it is followed by certain vowels, including a word-final vowel. The FRM orthography also represents this as a consonant plus <w> (except for some words where it has consonant plus <u>, as in arrua below). Strehlow is more inconsistent, representing this in different words as consonant plus <w> or <u> or <o>.

Table 10.

<table>
<thead>
<tr>
<th>Strehlow Dictionary</th>
<th>FRM Orthography</th>
<th>IAD Orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; ua &gt; lankua ‘bush banana’</td>
<td>Langkwa</td>
<td>langkwe</td>
</tr>
<tr>
<td>&lt; uia &gt; inguia ‘old’</td>
<td>Ingkwiya</td>
<td>ingkweye</td>
</tr>
<tr>
<td>&lt; wa &gt; kwata ‘egg’</td>
<td>Kwaarta</td>
<td>Kwarte</td>
</tr>
<tr>
<td>&lt; we &gt; kwenja ‘windbreak’</td>
<td>Kwintja</td>
<td>Kwintye</td>
</tr>
<tr>
<td>&lt; oa &gt; aroa ‘rock wallaby’</td>
<td>Arrua</td>
<td>Arrwe</td>
</tr>
</tbody>
</table>

5 **Use of the Mission Orthography**

The Mission Orthography can be examined as a system that developed over its time, and as the predecessor of the modern phonemic orthographies. Its origin and development can be understood in terms of the individuals who contributed to it, notably Kempe and Strehlow, but it must also be considered in terms of its intended users and their responses to it. As already noted, the Mission Orthography was used in educational and religious works, a scholarly grammar and dictionary, and in personal correspondence. It was used by Aranda people, though perhaps mostly within the school and church contexts. The Mission Orthography was clearly intended to be a practical orthography, and its details were established by Kempe and Strehlow with practical considerations in mind. This is evidenced by Kempe’s explicit attempt to keep the ‘number of written characters
as few as possible’ (1891a: 2), and Strehlow’s (1908) reluctance to make significant
changes to the orthography once it had become established in the Hermannsburg
community. There was also recognition of the importance of the broader context of
English literacy in Australia in Strehlow’s (1908) comment on the greater suitability of
<y> over <j> in the Aranda orthography. T.G.H. Strehlow continued that sensitivity to
context in justifying his later phonetic orthography (1971: 1).
If the importance of making a distinction between a practical orthography for use in the
language community and an orthography for scholarly or ‘scientific’ description of a
language now seems obvious, it is because of more than 100 years of experience in the
creation of new orthographies, a history in which Kempe and Strehlow played an early
role. The tension between the development of a ‘scientific’ (phonetic) alphabet and a
practical writing system can be seen with the adoption, and later abandonment, of the
Lepsius Standard Alphabet (1863) for writing the Dieri language at the Bethesda Mission,
which was also founded by missionaries from Hermannsburg, Germany, in the late
nineteenth century. The Standard Alphabet was specifically developed for use with
hitherto unwritten languages, as opposed to situations where there was (as with Sanskrit)
an existing orthographic tradition. One of the principles of the Standard Alphabet was that
‘every sound must be defined physiologically before being given a place in the alphabet’.
In the view of Kneebone (2005: 356), the main weaknesses of the Standard Alphabet
were the tension between collectors of data and specialised scientific researchers, together
with the complexity of the diacritic system, which gave rise to problems for the ‘writer,
reader and printer’. A similar story took place later in the Finke River Mission’s
abandonment of T.G.H. Strehlow’s phonetic orthography with its rich use of diacritics.
Oberscheidt (1991) characterises that change as the rejection of a ‘purely academic
orthography’, a criticism he directs not only to T.G.H. Strehlow’s phonetic orthography but to the modern IAD orthography as well.

5.1 Scholarly interpretation

Missionaries trained in philology were the primary translators and collectors of linguistic data for scholarly analysis throughout the nineteenth century, but they also benefitted from that analysis. Kempe (1891a) explicitly invited scholars to advise him on the analysis of Aranda, and Strehlow had a productive long-distance research relationship with the scholar von Leonhardi. Lepsius ([1863] 1981: 1) claimed that,

‘An intimate relation exists between linguistic science and Missionary labours. The latter, especially in new and hitherto unwritten languages, supply the former – chiefly by means of translations. Vocabularies, Grammars and Specimens – with rich, and in some cases the only, materials for further investigation and comparison’.

The Mission Orthography was under-differentiated in some aspects and over-differentiated in others. In this respect it was like other orthographies of that time, for example Black’s use of the International Phonetic Alphabet to record a Western Desert language (Black 1915). However, independently of the significance of this under- and over-differentiation for practical use in a language community, in some cases it resulted in misinterpretation of written materials by outsiders, including scholars. Planert (1907: 552) lists 13 simple vowels, 18 complex vowels (diphthongs) and 3 triphthongs in Aranda – far more than his contemporaries had recorded. His overestimation of the diphthongs was caused by his lack of firsthand experience of the language and his reliance on documents written in the Mission Orthography. Planert also
includes <ü> among his vowels, which Strehlow (1908) disputes, and claimed that ‘triphthongs are not uncommon’. This may refer to the vowel letter sequences in the printed materials to which he had access and from his language informant, returned missionary Nicol Wettengel. In response Carl Strehlow (1908: 698) stated that, ‘I am only familiar with the following diphthongs in the Aranda language: ai, au, oi, ui, ua. While the vowels a and e, e and a etc can certainly occur next to each other, they are never pronounced as diphthongs’. Planert claimed that he did not have access to Kempe’s (1891a) grammar, however, J. Strehlow (2011: 962, 1018) believes that Planert relied upon the written language in Kempe’s work to make his analysis.

Similar misinterpretation of the Mission Orthography has led in some cases to broader misunderstanding of the language. Alf Sommerfelt’s (1938) analysis of Aranda is based upon the work of Kempe and Strehlow, as well as the work of Spencer and Gillen. In an attempt to show how Aranda was a primitive language Sommerfelt claimed that Aranda lacked categories found in Indo-European languages and supported his points with false etymologies (Wilkins 1989: 18; McGregor 2008: 6). One such etymology which involved nama, supposedly meaning both ‘sit’ and ‘grass’, was based upon an under-differentiation in the Mission Orthography. These are in fact two distinct words, with distinct pronunciations, represented as neme and name respectively in the IAD orthography.

6 Major developments in Aranda orthography

From Kempe’s establishment of the Mission Orthography, its phonetic basis was seen as adequate for the purpose of practical communication between speakers of the language. They were able to recognise words even though not all the significant sounds of the language were distinguished in writing. Oberscheidt (1991: iv) notes that in reading, ‘speakers of the language had continued to pronounce the dentals and retroflexes even when the missionaries failed to provide symbols for them’. This is to be expected for
fluent readers because, once fluent, the processes of reading rely more on the recognition of whole words than on composing a word from its individual sounds.

During the period of phonetic orthographies, developments in phonetics and in orthography design increased the ability of researchers to discriminate and represents speech sounds. The Mission Orthography was one of a number of phonetic systems for Australian languages. These include Black (1915) and later, the Adelaide University Phonetic System (AUPS) in the 1930s (Monaghan 2008). T.G.H. Strehlow used a version of the AUPS orthography for his fieldnotes and scholarly works. He produced an academic description of Aranda phonetics and grammar with a narrow phonetic transcription (1944) which, among other features, distinguished 22 vowel phones [iː ɨ eː e ɛː a ɑː ɑ̩ ɔː ɔ oː uː ʊ ə ɩ̆ ŭ]. Following standard practices in phonetic transcription, many of these narrow phonetic distinctions were represented using diacritics. A simplified version of this scheme was then used in T.G.H. Strehlow’s translation of the New Testament (1956) and in the Aranda Lutheran hymnal (1964). In comparison to the Mission Orthography, this system removed the major under-differentiation of place of articulation in consonants, and modified the categorisation of the vowels. A small sample from the hymnal gives the flavour of this orthography: ‘Jĩ́naŋa ḳůjílai̇, Ǐŋkātai, Dùŋ’ Uŋgwâŋaŋibẽra’. (IAD ‘Yenghe ngwerililaye, Ingkartaye, Ngwange ngkwangenhiperre.’)

As a practical orthography, however, T.G.H. Strehlow’s orthography was disliked by the Hermannsburg mission staff who thought it made it difficult to write Aranda. The extensive use of the diacritics also presented technical issues for the printing technology of the day, and had also caused major delays in the printing of T.G.H. Strehlow’s major works (Breen 2005: 94). A revised orthography was used in Albrecht’s (1979) catechism, where diacritics played a more limited role, only distinguishing the place of articulation
of some consonants, for example ‘ŋaniber aṭa raganjaŋka’ (IAD ‘nhanhiperre athe rrekangkerrewerne’). The fate of the diacritics was sealed by the advent of personal computers, as the early models did not readily handle all the diacritics used for Aranda (Oberscheidt 1991: iv).

The development of the theory of the phoneme extended understanding of the sound systems of languages by expressing which phonetic differences are used to differentiate words in a language. Sounds in a language that are contrastive in this way are expressed as the phonemes of the language. The phoneme concept was used in language description in American Structuralist linguistics, and many Australian linguists were first introduced to it by the first schools of the Summer Institute of Linguistics (SIL), held in Melbourne in the 1950s. SIL linguist Sarah Gudschinsky was instrumental in developing orthographies for languages as a way of encouraging literacy among speakers of those languages. These were based upon the identification of the distinctive phonemes of the language, considering the ‘functional load’ of each in relation to the whole language system (Gudschinsky 1973: 120). Pastor John Pfitzner, who was based at Hermannsburg Mission from 1969 to 1984, attended a workshop run by Gudschinsky in the summer of 1972–73. Pfitzner reanalysed the sounds of Aranda and created the modern FRM orthography, which then replaced both the Mission Orthography and the later phonetic orthographies. Pfitzner replaced the consonant diacritics with digraphs and reanalysed the vowels (Breen 2005: 95). As no words are differentiated by the voicing of stops, and speakers generally make no distinction between voiced and unvoiced stops, this distinction was no longer represented: the stops were represented as ⟨p⟩, ⟨t⟩ and ⟨k⟩, and ⟨b⟩, ⟨d⟩ and ⟨g⟩ were dropped.

The development of the FRM orthography was paralleled by Breen’s phonemic analysis of firstly Antekerrepene and then other Arandic languages, and the subsequent
development of a phonemic orthography on this basis by the then School of Australian Linguistics (Breen 2005). Through the Institute for Aboriginal Development (IAD), Breen and other researchers began to develop orthographies for Arandic languages including Western Arrernte, Eastern and Central Arrernte, Anmatyerr, Alyawarr and Kaytetye. The process involved meetings to consult with speakers of the languages over a number of years. These orthographies are distinct to each language, according to the differences between these languages and the preferences of their speakers, but they all follow similar principles, thus the Common Arandic approach. These orthographies have been used to produce dictionaries including the *Eastern and Central Arrernte to English Dictionary* (Henderson and Dobson 1994), the *Introductory Dictionary of Western Arrernte* (Breen et al. 2000), the *Central & Eastern Anmatyerr to English Dictionary* (Green 2010), the *Kaytetye to English Dictionary* (Turpin and Ross 2012) and the *Alyawarr to English Dictionary* (Green 1992; second edition by Blackman et al., forthcoming).

As summarised above, the most significant differences between the FRM and IAD orthographies of Western Aranda are the representations of vowels and diphthongs. The FRM orthography, and some orthographies in the Common Arandic approach, have undergone minor modifications since their inceptions but are now generally considered to be stable. A change made to the FRM orthography was to drop <o> from the orthography (Roennfeldt et al. 2006), re-categorising these vowel phones with the other vowel phones represented by <u>. This brought it closer to the IAD orthography. In Wilkins’s phonemic analysis of Mparntwe Arrernte (1989: 78) the phoneme /u/ has allophones [o] [ʊ] [ɔ] [ɔː] and [u] in different contexts. For a short period the school at Ltyentye Apurte (Santa Teresa) introduced <o> into its orthography, but withdrew it so that there was a
consistent orthography for Eastern/Central Arrernte in all the communities in which it is spoken.

7 Concluding remarks

The Mission Orthography was a uniform phonetically-based orthography of the late nineteenth century which was used for practical purposes by speakers of the Aranda language, both Aboriginal and non-Aboriginal. In the view of Gudschinsky (1973: 117), it is never possible to devise an orthography in a social vacuum, that is, apart from social pressures, for example dominant national languages such as English and their writing systems. This continues to be true for Western Aranda. Major languages impinge upon minor languages, and often force the orthography of the latter to compromise.

In the development of an orthography, the language of the creator is important. This means that we have had to consider German phonology and orthography in understanding how the Mission Orthography was devised by its German-speaking inventors.

The Mission Orthography was in use over a century from 1877 to the 1970s, during which it was a functional means of written communication for those who could understand Aranda, despite distinguishing only a minority of the phonemes of the language. A relatively large amount of material was written in the Mission Orthography, particularly religious materials that were used regularly by the entire mission community, and educational materials. A relatively high degree of consistency in the writing of the language is evident from missionary publications and letters. As a result, there was resistance to changing the orthography when T.G.H. Strehlow developed a phonetic orthography based on the IPA from the 1930s on, in order to publish works about Aranda language and culture. The Mission Orthography of Kempe and Carl Strehlow, and its descendant in T.G.H. Strehlow’s phonetic orthography, coexisted into the 1970s when both were replaced by phonemic orthographies.
References

Albright, Robert William (1958). The International Phonetic Alphabet: Its backgrounds and
development. Publication Seven of the Indiana University Research Center in
Anthropology, Folklore and Linguistics 24.


Basedow, Herbert (1908). Vergleichende Vokabularien der Aluridja-und Arundtda-Dialekte

Black, John McConnell (1915). Language of the Everard Range Tribe In S.A. White (ed.),
Scientific Notes on an Expedition into the North-western regions of South Australia in


Nash, Mary Laughren, Peter Austin and Barry Alpher (eds) Forty years on: Ken Hale and
Australian languages. Canberra: Pacific Linguistics

Strehlow Research Centre Occasional Paper 4, edited by Anna Kenny and Scott
Mitchell, 93-102.

Breen, Gavan (n.d.) Arunta and Aranda and Arrernte: why do we spell like that? IAD Press:
Alice Springs.

Western Arrernte. IAD Press: Alice Springs.

Cambridge: Cambridge University Press.


American Philosophical Society, 322-339.


http://hiphilangsci.net/2013/10/16/a-uniform-orthography-and-early-linguistic-research-in-australia


Conclusion

With thorough training in translation and philology German Lutheran missionaries recorded the languages of Central Australia. It was through their long-term involvement and concern to understand Aboriginal people over decades that the missionaries recorded Aboriginal languages. They adapted their knowledge of classical and contemporary European languages to make the first records of Australian languages. Their linguistic labours included grammars, dictionaries, texts and studies of Aboriginal societies. Lutheran missionaries made the first two translations of the New Testament into Aboriginal languages at Killalpannina (1897) and Hermannsburg (1928).

1.1 The significance of this thesis

In this section I will summarize the papers which comprise this research and their place within this thesis. They are a contribution to the history of linguistics, linguistic research and translation. The serious attempt to reconstruct the thought of previous times is surely the primary goal of the history of science (Graffi 2001). The first part of this thesis describes the historical and philosophical context of missionary linguistics in Central Australia. While histories of linguistics have been compiled of linguistics in the United States (Hymes and Fought 1981) and Britain (Robins 1979) the history of Australian linguistics is a recent topic in academic discourse and until recently there have been few studies focused upon the history of the discipline. Until the edited volume Encountering Aboriginal Languages appeared (McGregor 2008) there had not been a publication dealing with the history of linguistics in Australia, tracing the development of linguistic description from its origins through stages of increasing professionalization. The
seventeen papers in McGregor 2008 were an attempt to address this deficiency. Nor has there been much discussion of the history of linguistic fieldwork (Chelliah and de Reuse 2010).

2 Areas where this thesis extends knowledge

2.1 Missionary linguistics in the nineteenth century

Although the history of missionary linguistics has been written for other countries of the world, there has been little discussion of the history of missionary linguistics in Australia, given the enormous contribution that missionaries made to the description of Aboriginal languages in the nineteenth and twentieth centuries. Their work forms a more detailed and thorough record of the language than those of their contemporaries. As Stockigt (2016) reports, Threlkeld was ‘describing foreign, non-SAE languages’ with the London Missionary Society. That Threlkeld learned the language was ‘singular’ (Roberts 2008:109) and also influenced by a strong tradition of missionary Bible translation, that was then at its peak. Although impressive for their time against a background in which ‘British colonists showed remarkably little interest in Aboriginal languages’ (Roberts 2008:109), neither Threlkeld nor Wilhelm Koch achieved anything comparable to what Carl Strehlow achieved with Die Aranda and the New Testament translations.

Missionary publications should be given more weight than those of at least some of their contemporaries because of the time that they spend in contact with Aboriginal people, their engagement in Central Australian languages, their ability to understand what their informants were saying and their engagement in solid, empirical research. Schmidt (1911) shows the degree to which the data from missionaries was reliable and that Frazer and other anthropologists were actually dependent upon their research. The missionary translations are accurate as later researchers such as T.G.H Strehlow (1971:xxiii) found
when he attempted to translate the languages himself. Many other researchers have reported the same. Usually those who themselves have learned languages and know the kind of problems associated with translation from one language to another and who realise that the claims made by those with little experience and language ability are distorted and false. Compared with the outlandish claims of researchers such as Geza Róheim in the *Riddle of the Sphinx* (1974) the work of the missionaries was accurate and grounded in solid experience. Róheim’s findings in his brief period of fieldwork were dictated by Freudian psychology and reveal the extent to which he was unable to be objective in his study of Central Australian Aborigines. Róheim alleged that Aboriginal people were engaged in cannibalism: ‘Among the Pitchentara every other child is killed by his father and eaten by his mother and the other children in the family’ (Róheim 1974:37). As T.G.H Strehlow (1971:xvii) recognised, ‘too many half-truths mar his writing’.

The inaccuracies in the work of Spencer and Gillen (1899; 1904; 1927) have been highlighted throughout this thesis. Certainly, an ‘evolutionary mindset’ diminished their ability to learn languages. Their understanding was limited to visual observation and excluded the non-visible, as ‘neither Spencer nor Roth comprehended the essential spirituality and symbolism of the Aboriginal world-view’ (Mulvaney 2005: 117), which diminishes the value of their work. They also saw no future for Aboriginal people and predicted that, ‘with advancing civilization, the black will die out’ (Mulvaney 2005:118).

Today anthropologists take a more relativist stance and the earlier social evolutionary views have been discarded. The failure of Spencer’s program of government-managed reserves (McGregor 1997:98; Gray 2007: 42) and the discrediting of social evolutionism as a valid anthropological theory has highlighted the importance of alternative views. Despite the recognition by many knowledgeable scholars of the limitations and biases of
Spencer’s work, quite unaccountably, the influence of his work has lingered on in anthropology (Moore 2016) and has even been defended by some such as Morphy (1996). While social evolutionism has proved to be a dead end, the linguistic foundation which the missionaries established continues with the ongoing description and translation of Central Australia Aboriginal languages.

2.2 The Reformation and the Lutheran tradition

Most important for the missionaries was their Protestant, specifically Lutheran, faith (Moore 2015). The missionaries were supported by Lutheran communities in South Australia for which the most important factor in their immigration to Australia was their religious convictions. The confessional Lutheran missionaries from Hermannsburg and Neuendettelsau shared similar outlooks in their determination to control their own churches and schools and to resist their integration into the state church. The sixteenth century Reformation was decisive in creating cultures of literacy and translation throughout Central and northern Europe (Moore 2016). In Germany the influence of the Reformation continued throughout the following centuries, particularly in the Protestant regions of Europe. The reforms were not only religious but also educational as the Reformers harnessed the research of humanist scholars to translate the Bible into European vernacular languages. Humanist philology grew up in the environment of Protestantism as a result of Melanchthon’s foundation of the humanist gymnasium and universities which combined Lutheran theology with philology. For the Protestants ‘faith went with literacy’ (Peterson 2004:122) and the ‘ability to read the Word of God for themselves’. Strategies of conversion broadly reflected their faiths (Errington 2008:95) as there has often been a strong contrast in the goals of Protestant and Catholic missionaries.
The fact that anthropology developed in an overwhelmingly Protestant context ‘has received remarkably little attention’ (Penny and Bunzl 2003:23). Protestants were far more inclined to translate and publish than Catholics (Anderson 2006). It is not surprising that Protestant missionaries would have had more interest in the native languages and that Protestants would have been even more committed to learning them than Catholics (Samarin 1984: 436). Catholic missionaries had little reason to invest much time in describing or learning their convert’s languages. Instead they sought out languages of wider communication, such as Nahuatl in Mexico. Catholic missionaries in the nineteenth century were concerned mainly to instruct their converts into a global community in ‘vocalized exchange between God and the priest, and between the priest and the hearer” (Peterson 2004:12). An understanding of the basics of the faith sufficed, in their view, for natives to participate in Catholic worship.

I argue against an essentialist interpretation and the generalisations about German missionaries. In the century before World War 1, missionary activity was a huge enterprise in Europe, and nowhere more so than in the German-speaking lands (Tampke 2006:57). Collaborations went across ethnic and national lines. British and Germans cooperated with each other in the nineteenth century through a common adherence to Protestant Christianity. This was no more evident than in missionary ventures, where Evangelical Britons and Pietist Germans worked together for the spread of the Christian message of the gospel. The Hermannsburg mission society founder Louis Harms sent missionaries to British colonies. The mission established did some of its most notable work in them. One of the preeminent institutions for the study of linguistics, Göttingen University was founded by George II who was King of Great Britain and the Elector of Hannover. The university was closely linked with Britain during the first half of the nineteenth century when Ludwig Leichhardt studied there (Roderick 1991:27). In the
nineteenth century German literature and culture was appreciated in England (Trompf 1978:37). The German philologist F. Max Müller was professor of Comparative philology at Oxford and wrote popular books on the science of language which were read by Central Australian missionaries.

2.3 Translation

One of the central points of this thesis has been the dependence of linguistics upon translation and, indeed, upon accurate translation. There has been limited understanding of ‘language-aspects of intellectual history and of the study of comparative institutions’ (Steiner 1975:271). And yet ‘translation is probably the single most telling instrument in the battle for knowledge’ (Steiner 1975:270). The need to translate created the foundation of linguistics but the centrality of translation to linguistics has hardly been recognised in the history of the discipline. There has been very little written about the process of translation, about the translators, the contexts of their time and the kinds of issues which were involved in translation from source languages such as English and the classical languages.

The missionaries played a pivotal role in the translation between societies and languages. Their training in philology supported their long-term goal of translation. It was translation which led to such as deep and intricate engagement with language in which the Neuendettelsau missionaries made their greatest contribution. The contribution of missionary linguists to the field of translation continues today (Holcombe 2015). Most notable has been missionary engagement in Bible translation. They focused upon Luther’s theological agenda as it had been revived in the nineteenth century Lutheran Confessional movement. They were in a prime position to collect and to interpret ethnographic data,
arriving in Australia before the development of anthropology as an academic discipline.
The need to achieve practical and missionary goals in the frontier situation was frequently at odds with the need for research and they were often in conflict with mission committees as the priorities of the missionaries were not shared by the mission committees.

2.4 Language Ideologies

Central to this thesis has been attitudes to language in Australia. The connection between religion and the philosophy of language is significant. The origins of anthropology and linguistics began with translation and the interest in language comparison which is so evident in the work of philosopher and Lutheran pastor J.G. Herder. However, links between Herder and the missionaries are tenuous. Rather I have explored language ideologies which originate with humanism and the Reformers and their concern for returning to authentic sources. Humanism continued through Hamann, Herder and the German philosophy of language.

One of my conclusions about language ideologies is about the willingness of missionaries to learn languages. It was usual for many German Lutheran missionaries to learn Aboriginal languages and to become highly competent at speaking them in a country which was largely monolingual and English-speaking. This was made possible because missionaries usually stayed in the field longer than others (Volker 1999).

The missionaries opposed notions about ‘primitive languages’ which were widespread in linguistics and anthropology in the twentieth century as reflected in the works of British anthropologists such as Spencer and Malinowski and linguists such as Jespersen and Sommerfelt (Moore 2017). The complexity of Aboriginal languages was an important
argument to counter claims of ‘primitive languages’ (Stockigt 2016:447). This had earlier been a theme with Kempe (1891: 25) who claimed that ‘from one mood can be made 9000 different phrases’. Strehlow’s article in *The Register* (1921) indicates the respect that he had for the language and its speakers. He recognised that Aranda was a fully adequate, and even highly sophisticated, means of communication for its speakers that was comparable to Classical Greek. His contribution to countering the notion of the primitive mentality of Aborigines or of ‘primitive languages’ was important as Elkin (1937: 167-168) realised:

Since his time Pastor Strehlow, and more recently Mr. T. G. H. Strehlow, have considerably extended our knowledge of the same Aranda language, and in doing so have shown definitely that the mental life of the Aborigines is much richer than has hitherto been realized. In particular, our increasing knowledge of the secret life with its myths and chants shows that there, probably more than in the speech of everyday, use is made of abstract terms, metaphorical expression, poetic form, delicate shades of meaning presentation, resulting in a literature which is an inspiration and a source of life to the initiated.

2.5 German achievements in scholarship

The greatest achievements in Germany in the nineteenth century were in the field of philology and its gradual extension from classical languages to Sanskrit, Germanic languages and other Indo-European languages. Germany led in the fields of comparative philology, dialectology, phonetics and the description of hitherto undescribed languages. The greatest achievements of Germans in Australia were in language description and translation as Germans did work that almost nobody else did over a long period of time and with a high level of professionalism.

Arriving in 1838, not long after the foundation of the colony of South Australia, Germans were a prominent part of Australian society and the largest group of settlers, apart from the British and Irish-descended Australians. There were large settlements of Germans who settled in South Australia, supported by Protestant Evangelical Christians such as George Fife Angas. Missionaries Teichelmann and Schürmann were supported by
Governor George Gawler. Another migration of German settlers occurred after the failed revolutions in Germany in 1848. The primary identification of the missionaries was as part of a religious community in common with Australian German Lutherans who supported their missionary work. By 1900 German settlers and explorers had spread out to every corner of the new colonies and had achieved much by that early stage in Australia’s history. German travellers were welcomed by settlers and government officials and colonial governments sponsored German researchers. In the field of botany Ludwig Preiss (1811-1883), Ludwig Leichhardt (1813-1848), Ludwig Becker (1808-1861) and Ferdinand Mueller (1825-1896) were all Lutherans, as well as being leaders in science.

The training at Neuendettelsau was primarily in biblical and classical languages which were studied with theology as sacred philology as it had been in the centuries following the Reformation in Germany. Missionary candidates practiced translation between languages and engaged in textual criticism and interpretation. They used dictionaries and read commentaries of the ancient languages. Their training included training in spoken arts, in preaching and rhetoric, reflecting the importance of the oral word to Lutheranism. At Neuendettelsau, the involvement of Friedrich Bauer brought a scholarly engagement with language into the curriculum. He applied philology to the German language, creating a textbook for the High German language which represented a modern approach to language. Bauer’s grammar was in continuous use at the Neuendettelsau Mission Institute from the 1850s to at least the 1930s and was used to teach about the grammar and semantics of the German language to missionary candidates. The result was missionaries whose training in language enabled them to undertake language research.

2.6 Language research
The missionaries were more closely affiliated with general linguistics than with comparative philology. In nineteenth century Europe, comparative philology was largely an armchair discipline which focused upon sound correspondences of Indo-European languages which were based upon written sources. In the early nineteenth century philology was taught in Germany as a humanist concern to understand texts. Over the course of the nineteenth century, greater interest was shown in living languages and in recording those languages. Advances in the philological sciences, translation theory and textual criticism led to the extension of these disciplines to unwritten languages.

The faultlines between missionaries and others were based upon the humanism of the Christian missionaries with its engagement in language and the way in which it took religion seriously. Those who were religious were far more supportive of German Lutheran missionaries, regardless of their ethnic or national backgrounds and even their religious backgrounds. Britons N.W. Thomas and Andrew Lang read German and made a positive assessment of the missionaries. Catholic Pater Wilhelm Schmidt (1911) was more positive in his assessment of Strehlow than were others, including other German researchers such as Planert and Eylmann who were positivists in their theoretical outlooks and were antagonistic towards missionaries and dismissive of missionary efforts in linguistics and translation.

3  The description of Aranda

3.1  The distinctive contribution of Carl Strehlow

Strehlow spent the best part of three decades in the Central Australian field. Taking the texts, songs, grammars, dictionary, hymn book and New Testament translation we have a
rich record of the Aranda and Loritja languages. The German and American writer Margot Benary-Isbert (1969:144) witnessed Strehlow’s visit to the Frankfurt Ethnological Museum and mentions a sign language collection of 454 signs which forms only a part of the immense corpus which Strehlow deposited in the museum, representing the world in which he was embedded. The most detailed material in the Frankfurt Museum came from Australia. Strehlow made the first extensive collection of material from a Western Desert language (Luritja) a generation before records were made of other Western Desert languages, a fact acknowledged by South Australian scholar of Western Desert societies W.H. Edwards (J. Strehlow, pers. Comm, 30th July 2017).

*Die Aranda* was immensely influential in Europe. But although Kempe and Strehlow were aware of the significance of philology in Germany, it was through Leonhardi’s involvement that Strehlow was able to engage with European scholars. But Leonhardi’s influence alone was not the cause of Strehlow’s prolific work. Strehlow had already assisted in the translation of the Dieri New Testament which owes much to his linguistic ability. He was still engaged in that task when he went to Hermannsburg and began the task of learning Aranda, and later Luritja. Further research is needed to determine why other Neuendettelsau-trained missionaries such as Johann Flierl and J.G. Reuther also made such significant linguistic contributions.

### 3.2 Words

The missionaries sought to understand the meanings of Aranda words and to find theological key terms. Strehlow’s approach was conservative, initially replacing foreign loanwords in Kempe’s hymnbook with terms derived from Aranda (Moore 2015). Changing the liturgy of a Christian community which had adopted particular usages two decades earlier would have been a difficult task. The dispute about the meaning of *Altjira* shows the degree to which the translation of terms was problematic. The translation of
‘God’ was contested by both anthropologists and Luritja speakers (Moore, forthcoming) and shows the difficulty which the missionaries faced in adapting terms. Strehlow’s roles as missionary translator and researcher placed him in a unique situation to probe the meanings of words. His dictionary contains 15,000 words in three Aboriginal languages and was the most detailed of its era.

3.3 Texts

The most noticeable area of difference between the missionaries and their contemporaries was in the collection of texts, recording myths and songs. Three volumes of *Die Aranda* are largely linguistic rather than ethnographic. Volumes one (1907) and two (1908 and 1910) contain Aranda and Loritja texts, including interlinear and free translations, consisting of over four hundred clauses. Volume 3 (1913) contains songs and songline translations in Aranda and Loritja. The first three volumes amount to 380 pages in the English translation, over half of the book. Even the second half of *Die Aranda* is heavily dependent upon the linguistic analysis and translation. The most important component of the work, as conceived by successive editors such as Leonhardi and Hagen was the *Urtext*. The unfinished section deals mainly with their material culture, implying that the latter was the less important part of the work. The collection of texts and songs was the most detailed of its era, and in fact was hardly surpassed until the time of Carl Strehlow’s son T.G.H. Strehlow (1971), later in the twentieth century. It is an enormous linguistic resource which is rich in detail and accurately translated. The grammar and dictionary, although unpublished were designed to complement *Die Aranda*. However, this never happened due to Leonhardi’s death in 1910. Carl Strehlow is one of the first researchers to take the Aboriginal songs seriously. According to TGH Strehlow (1971:65) ‘My father was the first research worker who conclusively proved that these songs, hitherto neglected
as unworthy of serious scientific attention, consisted of intelligible poetry, and that through their agency the deepest religious ideas of our natives had been carried forward through the ages’.

3.4 Grammar
I have explored the differences between Kempe and Strehlow in the paper on grammar. Although he laid the foundation for missionary linguistics at Hermannsburg, Kempe had a limited grasp of the grammar of complex sentences which was important for translating into Aranda and Luritja and from the source languages (German and Greek) into Aranda. He used ‘Participle’ to represent imperfective aspect which resulted in incorrect translations. Strehlow corrected these translations. Strehlow’s language corpus was far more extensive than that of the Hermannsburg Mission Institute missionaries and it is with reference to the texts and translations that his understanding of the grammar is best understood.

3.5 Sounds

The missionaries sought to create a practical orthography which could be used in Bibles and hymn books. They devised a ‘uniform orthography’ of the type that had been used by scholars for writing Aboriginal languages since at least the first half of the nineteenth century. The ‘Mission Orthography’ was used for their publications and also for correspondence as a large number of letters held in the Strehlow Research Centre testify. By contrast the I.P.A alphabet consisted of very few symbols even in the first decade of the twentieth century because it was not designed as a universal orthography. An earlier ‘scientific’ alphabet the Lepsius Standard Alphabet was rejected by the missionaries at Bethesda because of its unsuitability for printing mission documents. The Mission
Orthography co-existed with T.G.H. Strehlow’s ‘narrow transcription’ phonetic writing system and was replaced by a phonemic orthography in the 1970s.

4 Reasons why their work was sidelined
Why was the tradition sidelined in Australia and Britain? Kenny (2013:2) lists some reasons: ‘anti-mission sentiment past and present, the impact of Nazism on anthropology in Germany, Australian hostility towards the Lutherans of Central Australia in the first half of the twentieth century and finally the antagonistic debate between TGH Strehlow and the Australian anthropological establishment in the 1960s and the 1970s’. However there were other reasons that were equally or more significant.

4.1 The German language
Another factor was that the English translation of Die Aranda was published in German and most Australians couldn’t read German. While German had been a language of international scholarship (Barth et al 2005: 137) and was formerly learned by many English speakers, it was less so after the two world wars which led to estrangement between Germans and Britons. The beginning of the twentieth century was a time of language change for the Australian Lutherans and a move to education in English. Language was part of a religion-language ideology (Hatoss 2012:96; Woods 2004). Although both Kempe and Strehlow cooperated with British researchers and missionaries, Kempe published his work in English as the Hermannsburg missionaries had a long history of working in British colonies. By contrast, the founder of the Neuendettelsau Mission Institute Wilhelm Loehe stressed the use of German in churches as his original intention was to support German migrants in North America to maintain their German-speaking heritage. The Immanuel Synod took control of the Hermannsburg Mission when the Hermannsburg-trained missionaries left the mission in 1891. The Immanuel Synod
‘attached to the German language a degree of sacredness’ and ‘the policy of the leading pastors of this synod was clearly set against conforming to the language and culture of the majority of settlers in South Australia.’ (Lehmann 1981:33; Woods 2004:46) The Immanuel Synod became the United Evangelical Lutheran Church in Australia or UELCA (in German this was the VELKA) in 1921 (Lehmann 1981:33). The takeover was fortuitous because Neuendettelsau-trained missionaries of the VELKA (Immanuel/UELCA synod) were far more inclined to learn and record Aboriginal languages than ELSA missionaries who established a mission on the west coast of South Australia. There was nothing forthcoming from Missionary Wiebusch at Koonibba when Leonhardi contacted him about obtaining information about Aboriginal culture and language there (J. Strehlow 2011:1019). After forty years, the UELCA was preaching the Christian message in six languages, ‘including the native languages’ (Hebart 1938: 156) and German. This contrasted with the Australian synod (ELSA, later the Evangelical Lutheran Church of Australia, ELCA) which was influenced by the conservative American Lutheran churches of the Missouri Synod. By 1913 its predecessor the Australian Synod was assimilating to the dominant language by using English liturgies. Thus the UELCA transmitted the language ideologies of the Lutheran tradition and German philosophy of language more faithfully than did the ELSA.

It was the connection to Germany through Leonhardi which enabled Strehlow’s Die Aranda to be published in the German language and accessible to readers of German in Europe and elsewhere.

4.2 The First World War

The unity and common purpose between Britons and Germans broke down in the twentieth century with the rise of the German Empire, the intense rivalry between
Germany and Britain and the casualty lists from the battlefields of World War One. By 1915, the relationships between Anglo-Australians and Germans had seriously deteriorated. Anti-German hysteria led to ‘an atmosphere of violence against German Lutherans’ (Linder 2000:61), persecution and the internment of those of German descent. The wars disrupted missionary linguistic and translation work. The Neunedettelsau-trained missionary Wilhelm Poland was interned as a prisoner of the Holdsworthy Internment camp during the first World War at Liverpool in New South Wales. What would have happened if Hermannsburg mission had been closed a century ago as Killalpannina was closed? That would have seriously damaged the work in linguistics and translation in Central Australia and the loss to the study of Australian Aboriginal languages would be incalculable.

John (2010:11) reaches the conclusion that it was due to the work and influence of Carl Strehlow that the Hermannsburg Mission was saved, ‘Indeed if it had not been for the valiant efforts of missionary Strehlow – who fortunately was widely respected – and the countless letters and reports of the FRM Board it seems almost certain that the Finke River Mission would have been lost to the Lutheran Church’.

4.3 The change in anthropology

However, the main reason for the exclusion of the missionary work was the effect of a narrow British anthropology which excluded language from its central concerns, for ‘while some anthropologists were wondering whether the Aranda had a proper language or religion at all, Strehlow translated the Aranda myths into German and the Bible into Aranda. This difference in perception is a fundamental one’ (Veit 1991:129).

Misunderstandings occurred when the anthropologists attempted to communicate in ‘Pidgin English’ (Strehlow 1971:65). Although Frazer’s work was dominant in the first decades of the twentieth century, it was increasingly discredited during the later decades
of the twentieth century as Britain moved to adopt Social Anthropology. However, that change did not lead to an appreciation of the earlier work. British and Australian anthropology was founded on very different lines from the German tradition which became so influential in the United States. T.G.H Strehlow continued his research in an earlier pattern of humanist philology and found himself in conflict with Social Anthropology in Australia and Britain, as it was increasingly dominated by the positivist social science of A.R. Radcliffe-Brown. There was a shift to the methods of the natural sciences, already apparent in the early part of the twentieth century and well under way in the mid-twentieth. The growth of the natural sciences led to scientism with an interest in visual ‘observation’ rather than actual linguistic fieldwork which involved listening to language speakers, the recording of texts and translation. Through positivist influences, interpretation, and semantics was ignored in Social Anthropology because of a focus on ‘function’ (Crick 1976:168). The focus shifted to the positivist exercise of collecting and arranging physical specimens in museums. Henson (1974:119) claimed that ‘in the period from about 1920 until 1960 British Social Anthropologists paid no serious attention to language.’ Unlike Britain, in North America, under the founding influence of Franz Boas, language had ‘long been treated as an integral aspect of what has been taken to be anthropology’s main object of study, that is: culture’ (Stocking 1974:17). Rather than being ‘transitional’ in Kenny’s (2013:10) assessment, it was cutting edge. It was the monolingual nature of Australia and an aversion to language study even within anthropology which led to a failure to recognise this important early work. Many English speakers showed little interest in Aboriginal languages or, when they were interested, lacked the training to be able to analyse them effectively. This lack of interest in Aboriginal languages remains the most important reason for the marginalisation of missionary linguistics along with the general ignorance of Indigenous societies and
languages in monolingual Australia and highlights the uniqueness of the German Lutheran contribution. Missionaries made a real contribution to linguistics and translation which requires further study.

5 Australian scholarship and future directions
This thesis is a contribution to the interpretation of early sources of Australian missionary linguistics. I agree with Stockigt (2016:445) who claims that the grammars are ‘important primary documents of colonial history in Australia, and deserve closer interdisciplinary attention’.

The work based at Hermannsburg represents the culmination of a century and a half of linguistics and translation from Lutheran missionaries. The Hermannsburg mission became the base for ongoing linguistic work and the influence of a strand of German philology and linguistics in Australia, one which valued language and had the humanistic training to record and understand those languages. The missionaries left a wealth of language documentation. The gradual refinement of the mission orthography, grammatical analysis and research into myths and songs were carried on by later researchers, particularly T.G.H. Strehlow and those who followed him in the latter half of the twentieth century. His distinctive contribution was in phonetics which was in focus in linguistics during the period 1930-1960. Colin Yallop (1977:2) recognised that at the time of writing ‘the only detailed account of an Arandic language is Strehlow’s’. Yallop followed Strehlow in his linguistic analysis of the Alyawarr language, introducing Descriptivist phonemic and morphemic analyses which were becoming more widely used in the 1960s. Although Yallop (1977) may be regarded as ‘the first comprehensive grammar of an Arandic language which is based upon modern linguistic principles’ (Wilkins 1989:19), there are limitations to his analysis. Wilkins (1989: 19) mentions plans to work towards ‘comprehensive grammars of Kaytetye and Anmatyerre’. Although
an Anmatyerr to English Dictionary has been published (Green 2008), a description of Anmatyerr has not yet appeared. There remains much work to be done on Arandic grammar.

We need to continue and extend the research into the history of Australian linguistics and translation. The Society for the History of Linguistics in the Pacific had its Inaugural Conference at the Australian National University in 2008. Since then there have been five conferences. During the term of this project conferences were held in Alice Springs (2014) and Potsdam, Germany (2016) and Adelaide (2018). Significant gaps remain and need to be filled as the papers of the edited volume covered linguistic research in the entire continent of Australia over 230 years.

A neglected area of research is the vast collections of linguistic material which was developed by Lutheran missionaries and is now held at the Strehlow Research Centre in Alice Springs. The manuscripts of the earlier works are now housed at the centre. Many of the earlier documents have not yet been translated from German into English and are therefore inaccessible to Australia’s English-speaking population. Making these documents available is a high priority and important for ongoing research into Central Australian languages and for the historiography of linguistics. Given the huge amount of material, this project represents merely a beginning into the investigation of linguistics and translation from the Hermannsburg Mission.

The next era of linguistics will hopefully be one which will combine richer documentary linguistics and more accurate descriptions of Australian languages with more careful and historically-informed interpretations of earlier sources.
References


ANU E Press.


Strehlow, Carl. 1909. Vocabulary of the Aranda and Loritja native languages of Central Australia with German equivalents. Unpublished manuscript located at the Strehlow Research Centre, Alice Springs, NT.


