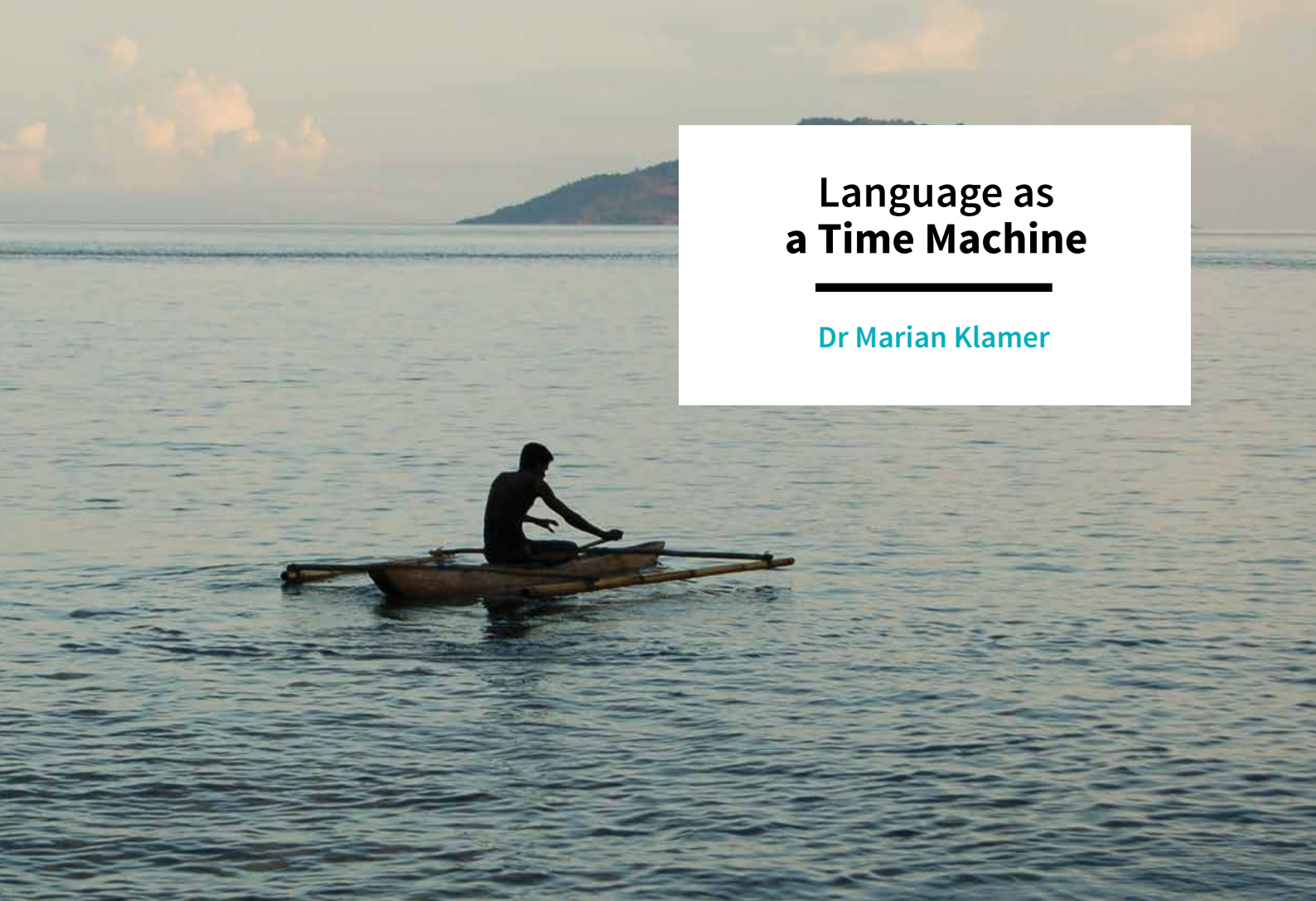


Language as a Time Machine

Dr Marian Klammer



LANGUAGE AS A TIME MACHINE

Language is the primary tool used by human beings to communicate with each other, allowing them to co-operate, explore their similarities and sometimes even bridge their differences. Yet it can also become a means to dive deep into the past, acting as a time machine that helps to re-construct the history of geographical areas and the populations inhabiting them.

Dr Marian Klamer at Leiden University specialises in the study of languages in their every aspect, with the aim of opening a window onto the past of areas of the world that have very few historical records.

The ways in which human beings communicate have constantly evolved throughout the years. Yet, regardless of whether individuals communicate in person, or through phone, e-mail, text message or pigeon post, all verbal and written exchanges between them are made possible by the existence of languages.

Languages allow us to express complex thoughts, abstract ideas and feelings to one another, which would be difficult to convey using mere gestures and arbitrary sounds. Roughly 6,500 languages are spoken in the world today, but about a third of these have less than 1000 speakers. In addition to their practical value in our daily lives, when analysed, languages can help researchers map the history of populations and the geographical areas they inhabit. The field of historical linguistics does exactly this, by studying language as a system: in its grammatical structure, meanings, sounds and unique characteristics.

Dr Marian Klamer at Leiden University in the Netherlands is an expert in linguistics and has devoted her career to the complex task of researching Austronesian and Papuan languages, spoken in areas that have very few historical records. Dr Klamer's interest in these languages dates back to her childhood years in southwest Papua, a region of Indonesia populated by a vast variety of cultural groups. 'Part of my roots lie in southwest Papua, where my parents worked as a missionary and a nurse,' she explains. 'From my parents, I learned that the colourful multitude of people, cultures and languages is a miracle that we must cherish.'

Dr Klamer spent her childhood in a small village in the jungle, inhabited by people from different clans. 'Every clan had their own language, so several Papuan languages were spoken in the village, alongside Papuan Malay that was used as a lingua franca; at home we spoke Dutch. Perhaps because of this early multi-lingual environment I have always been curious about how people use languages, and how different languages are structured,' she says.

Her early fascination with languages prompted her to study linguistics later in life, specialising in Austronesian and Papuan languages, many of which are at risk of extinction due to their limited number of speakers. Dr Klamer has conducted extensive linguistics research in Eastern Indonesia, trying to re-construct parts of its history by analysing its multitude of spoken languages. 'I compare structures and words of languages to find out how they are related to each other, to reconstruct their common history and find out in which ways they have influenced each other through contact,' she explains. 'This provides information about the history of speakers and the possible migrations and types of contacts they had in the past.'

Tracing History Through Language

Travelling back in time through the laborious analysis of languages is not an easy task. Languages comprise complex patterns related to grammar, vocabulary and phonetic characteristics. Historical linguists use vast amounts of language-specific data to try and trace a language's 'family tree', which points to other languages it



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derived from or was influenced by at some point in history. Generally, this process is carried out over relatively long periods of time, in collaboration with archaeologists, ethnologists, anthropologists and population geneticists.

There are two main ways in which languages can influence each other: through vertical transmission when languages have a common ancestor, or through horizontal transmission, when languages borrow words from other languages they come into contact with. Even names of cities or villages can help to retrace the history of a geographical area – if we think of village names such as Katwijk in Holland: the *wijk* part of that name derives from the Latin word *Vicus* (i.e. village) and dates back to the Roman times.

Words derived from other languages can help to identify past connections between different clans or populations, as well as the nature of these connections. Linguistics research can be even more interesting when applied to languages spoken in places with very few traces of the past, shedding light upon their history and the relationships between different populations.

Austronesian and Papuan languages

Linguists have often studied Western

languages, while languages spoken by minorities in other parts of the world have much less associated research. During her undergraduate studies, Dr Klamer became interested in the possible application of Western models of linguistics to the study of non-Western languages. ‘I learned a lot about formal theoretical models of “universal” structures of human language,’ she tells us. ‘I found it interesting to see that at the time these models were almost entirely based on Western languages and I was curious whether they could also be used to describe the structure of non-Western languages.’

The first time to test this was when Dr Klamer carried out fieldwork to study a language spoken on the island of Sumba, in Indonesia. ‘That was a short field study and I was still a student at the time, but it made me realise how little work was done on the hundreds of (unwritten) languages of eastern Indonesia, and that I wanted to contribute to documenting and describing some of them,’ she explains.

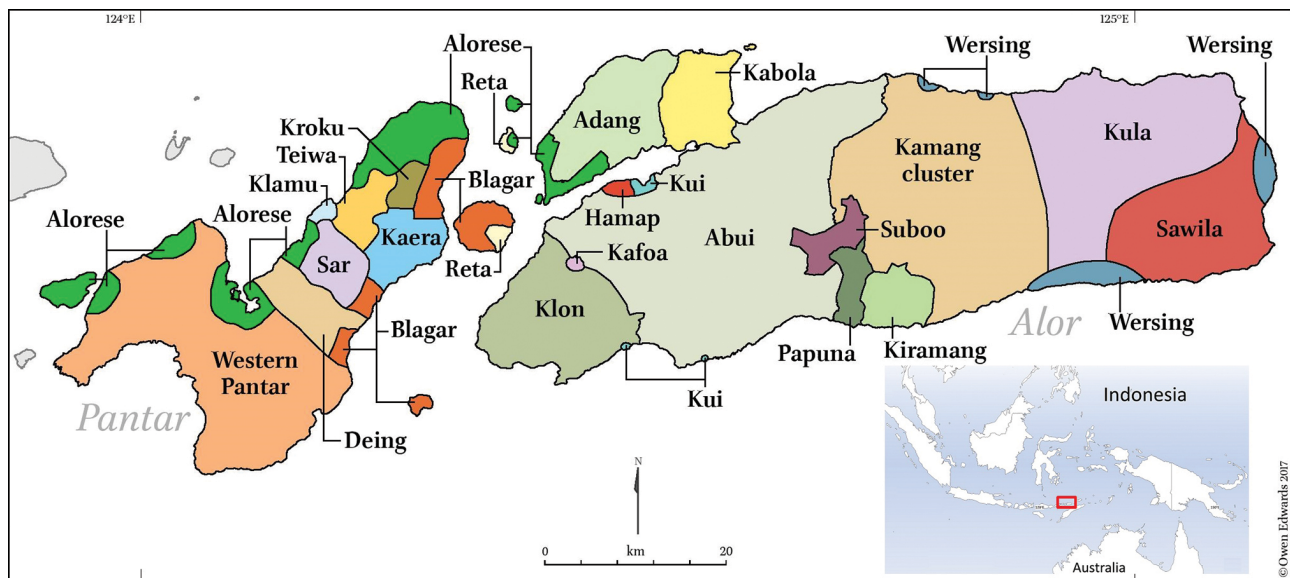
Languages spoken in Indonesia are Austronesian and Papuan languages. Austronesian languages are spoken in a variety of places, including Madagascar, the Philippines, Indonesia, New Zealand, Hawaii and Easter Island. Papuan languages are spoken in Papua New Guinea and other

neighbouring Islands. In total, there are about 1200 Austronesian and 800 Papuan languages, which together make up one third of all languages spoken on Earth. They include big languages such as Indonesian, Malay and Javanese, as well as small ones, spoken by less than 1000 people. Over 90% of the languages spoken in Indonesia have no written tradition, and could hence leave no trace once they become extinct.

The first lists of Austronesian words were collected by Dutch explorers Willem Schouten and Jacob Lemaire. Dr Klamer is continuing this Dutch tradition, focusing her studies on languages spoken in eastern Indonesia. ‘I believe that theorising about the structure of human language will work better if we take into account data from a wide range of non-European languages,’ she says. ‘But also, these languages are fragile cultural heritages under pressure from Indonesian, and they need to be fostered.’

Eastern Indonesia – a Multi-Language Region

Languages spoken in Indonesia today amount to approximately 700. Most of these have no related historical records and have never been studied before. At the moment, Indonesia’s linguistic diversity is being threatened by the widespread adoption of



Indonesian, the national language. This is particularly true in eastern Indonesia, where many parents are choosing to teach their children Indonesian instead of their native language.

As part of her job, Dr Klamer travels to Indonesia, speaking with its inhabitants and trying to learn more about their language and cultural heritage. 'I love studying languages, and I love working with people in the field,' she says. 'Indonesia is really a wonderful country with a truly amazing richness of peoples and cultures. People are always incredibly hospitable and welcoming, and always happy to share their knowledge.'

Speaking with local populations, Dr Klamer learnt that many children no longer speak their parents' language. This means that in one or two generations many of these languages could become extinct. Linguistic studies, such as those conducted by Dr Klamer, might help to preserve them, by developing orthography and compiling dictionaries, so speakers can write in their own language and the language can be used in schools. This would allow children to have a better grasp of their parents' language, while offering speakers of these languages a means through which to write down their traditional stories, songs and histories. The recordings that are made as part of the investigations are stored in an open access archive of language materials, so that records of these endangered languages will be available for future generations.

The Lesser Sunda Islands – Pantar and Alor

So far, most of Dr Klamer's research focused on comparing languages of the Lesser Sunda islands – particularly the islands of Alor and Pantar. In 2014, she was awarded a prestigious 1.5 million euro VICI grant by the Netherlands Organisation of Scientific Research (NWO), for five years of further linguistic research focusing on the Lesser Sunda Islands.

Before the arrival of European explorers, Pantar and Alor were part of the trading route between Java, Timor, Moluccas, China, Vietnam and India. The Portuguese were the first to make agreements with local leaders, followed by Holland in the 1800s. The inhabitants on these islands were perceived as heathens, some of which with cannibalistic and aggressive tendencies. Initially, contact was made with the people living on the coasts, but in the 20th Century, travellers discovered that the islands have around 20 different population groups, each with its own language.

As indigenous written sources are lacking, Western visitors collected the only sources of history relative to these islands during Colonial times. Dr Klamer has carried out research analysing the language of the different populations residing in Pantar and Alor, discovering links between them that point to past interactions between some of these communities. For instance, she found that a middle area on the map appeared to be cut off from the rest of the language family for a certain period in the past, as the languages spoken there had more influence from outsiders than the languages elsewhere on the islands. She also discovered that the population speaking a language called Alorese, the only Austronesian language on the two islands, was likely to have settled on Pantar about 700 years ago, originally coming from Flores, an island further east. Her studies were able to retrace some of the history of these two islands and their communities. This is of great value for historical reconstruction purposes, and it also helps researchers create more detailed genealogical groupings and 'language fingerprints', which could help to compare similar languages in future.

A Glance at the Future

Over the past 15 years or so, Dr Klamer's research has mainly focused on studying and comparing languages of the Lesser Sunda Islands, in order to find out more about the history of their people. She hopes to later broaden her studies to Papuan languages in other regions of Indonesia.

It is thanks to researchers like Dr Klamer that a variety of data was collected about non-documented languages in eastern Indonesia, which has provided valuable insight into the region's history and could help simplify the study of these languages in future. There is now a significant amount of data related to minority languages in Pantar and Alor. In future, similar data could also be collected in other areas of Indonesia, where languages are still largely unexplored.

'For the future, I hope that similar work can be done on more languages of Papua, for instance in the Bird's Neck region. The languages there are small, highly endangered, and most of them have not yet been described,' Dr Klamer tells us. In addition to her research, she would also like to provide local inhabitants with the knowledge and tools necessary to document their own languages, particularly endangered ones.



Meet the researcher

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Dr Marian Klamer is a linguistics professor with a particular interest in Austronesian and Papuan languages, as well as historical linguistics. Dr Klamer spent part of her childhood in Indonesia, before returning to The Netherlands in 1973. She carried out her postgraduate studies at Vrije University in Amsterdam, where she attained both an MA and a PhD in general linguistics. After completing her studies, Dr Klamer has been a lecturer in linguistics at several different Dutch universities, wrote several books, and carried out extensive research resulting in numerous articles on the grammar, origin and history of Austronesian and Papuan languages. Her projects have received several grants throughout the years, the most recent being a VICI Grant awarded to her by the Netherlands Organisation of Scientific Research (NWO) in 2014. Her research sees language as a key to understanding a place's socio-cultural history, exploring its historical significance using both quantitative and qualitative methods.

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