Abstract
Papua New Guinea has more languages than any other country, about 840 accounting for 12% of all languages spoken in the world. This work aimed to record and document the lifestyle, stories and folk tales about birds present in the cultural imagination of one of the numerous Papua New Guinean ethnic groups, the Nalik people. This research was conducted at Madina and Luaupul villages in New Ireland Province during the months between September to November 2016. Among the intended objectives were enhancing an awareness of cultural biodiversity and contributing to the empowerment of the community through renewed interest in its cultural heritage. The participants were six and seventh grade students and members of the local community. Research was conducted through three steps: (1) recordings of oral narratives in the community, and subsequent interpretation of their symbols in the local context; (2) exploration of these recordings through interdisciplinary activities with the students and developing the transposition of oral narratives into drawings and written forms; (3) validation and correction of the students’ text by the community. The material resulting from this process was subsequently edited and the final output was the short jointly authored book, A Maani: Birds and Nalik Culture, created through the eyes and experiences of the participants of the project.

Keywords: action research, traditional knowledge, indigenous community, educational project, Papua New Guinea, Nalik
Introduction

Papua New Guinea has more languages than any other country, about 840 (Simons & Fenning, 2017), accounting for 12% of all languages spoken in the world (Volker, 2014). It also has 5% of all biodiversity in the world (WWF, 2017). These data suggest a great biocultural diversity and a subsequent wealth of traditional knowledge of numerous ethnic groups. Much of this is related to plants and animals and is knowledge that has evolved over generations in a long process of human interaction and relationship with nature (Maffi, 2007).

Through a participatory and interdisciplinary approach, this research aims to record and document the lifestyle, stories and folk tales about birds present in the cultural imagination of one of the numerous Papua New Guinean ethnic groups, the Nalik people. This research was conducted through an education project lasting over eight weeks in 2016 with Grade 6 and Grade 7 students at Madina Primary School (MPS) and members of the Nalik community in New Ireland Province (NIP), Papua New Guinea (PNG).

This research also represents the conclusion of another project that began in 2010 when I was living in Japan and working as a teacher at an international school for Brazilian immigrants there. At that time, my first contact with MPS was at a distance as part of a Pen Pal Project (da Silva, 2013) between students there and students at my school in Japan, the Escola Brasileira Professor Kawase - Hiro Gakuen. I began this project so that my students would have an opportunity to practise and improve their English writing as well as to learn a little about another culture and country. As the letters went back and forth, the students on both sides shared information about their daily lives, and learned a lot about each other’s environment and way of life. My students’ curiosity was infectious so that just like them, their other teachers and I were eager to receive the next package with letters from MPS with stories and explanations about life in PNG.

This is the magic of educational projects. We might begin by planning the steps and goals of the project, but it ends up taking on a life of its own, taking us on physical and mental journeys that we had never thought of.

In my case I had an opportunity to visit PNG in 2014, when I went to NIP and spent a month in Madina Village. During this time, I had the pleasure of meeting and getting to know some of the students whose letters we had been reading in Japan over four years. I also experienced the warm hospitality and rich culture of the Nalik people. While I was in Madina, I began to think of a new educational project that could give students at MPS the possibility to document for themselves some of their people’s oral literature and folklore about animals in New Ireland. They could do this so much better than an outsider because they could describe their own experiences, speak from their own perspectives, and explore the ideas that would matter to them.

It took some time before I could begin to turn these thoughts into reality. But in 2016 I was able to return to Madina Village to put this project into practice as part of my masters’ studies in social education at the University of Coimbra in Portugal (da Silva, 2017a). The final product of this process was the construction of collective
book entitled *A Maani: Birds and Nalik Culture* (da Silva & Volker, 2018), created through the eyes and experiences of the participants of the project.

**Research territory and the participants**

NIP is formed by a group of islands, located in the northeast region of PNG. The main island, New Ireland (NI), has about 194,000 inhabitants and two districts: Kavieng, the administrative headquarters, located in the north of NI and Namatanai, located 260km to the south (Australian Doctors International, n.d.).

According to the Ethnologue (2016), NIP has 22 ethnic groups. The practices described in this work were developed in the domain region of the Nalik group, which is distributed in 15 villages in NI. The census conducted in 2000 listed 4000 people as belonging to this group, where the largest village is Madina, with about 600 inhabitants (Volker, 2014).

The participants involved in the pedagogical practices were 57 students, 23 of the grade six and 34 of the grade seven of the MPS, located in the village of Madina. These students live in Madina and in another village, about 2km away, called Luaupul.

The ethnic groups of NIP have a close interaction with animals, where they are represented in ceremonies, religious gatherings and social structuring. They also have very similar cultures sharing, for example, matrilineal societies that contrast directly with most other PNG indigenous groups that are patrilineal. The indigenous communities of the north of NIP, which includes the Nalik group, are organised into a clan system (Were, 2003), which are an important social feature, as they define family arrangements (kinship and descent), influencing marriages, land ownership, social positions, and the construction of personal identity. The clans are managed and led by maimais.

The Nalik group has eight clans, represented by wild animals from the NI region, seven species of birds and one snake (Table 1). The animals have great importance in traditional ceremonies representing clans, among which the most important are malangan (or malanggan), which feature sculptures carved of wood in honour of their ancestors (Volker, 1993, p.111). They are also protagonists in several stories, where they represent a complex relation with the ancestors.

---

1 The title maimai means “leader of a clan”, having permission to administer it and speak in public meetings, according to the traditional laws of its groups (C. A. Volker, personal communication, June 23, 2016).
Table 1: Nalik clans' name and their totemic animals.

<table>
<thead>
<tr>
<th>clan names</th>
<th>symbolic animal</th>
<th>animals' English names</th>
<th>animals' scientific names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moxomaaraba</td>
<td>a regaaum</td>
<td>Eastern osprey</td>
<td>Pandion cristatus</td>
</tr>
<tr>
<td>Moxokala</td>
<td>a rok</td>
<td>Red-bellied pitta</td>
<td>Pitta erythrogaster</td>
</tr>
<tr>
<td>Moxomaaf</td>
<td>a mangaaf</td>
<td>Coconut lorikeet</td>
<td>Trichoglossus haematodus</td>
</tr>
<tr>
<td>Moxokaamade</td>
<td>a babanga</td>
<td>Blyth’s hornbill</td>
<td>Aceros plicatus</td>
</tr>
<tr>
<td>Moxotirin</td>
<td>a dau</td>
<td>Great frigate bird</td>
<td>Fregata ariel</td>
</tr>
<tr>
<td>Moxonuaas</td>
<td>a baalus</td>
<td>Red-knobbed imperial pigeon</td>
<td>Ducula rubricera</td>
</tr>
<tr>
<td>Saramangges</td>
<td>a xalawizi</td>
<td>White-bellied sea eagle</td>
<td>Haliaeetus leucogaster</td>
</tr>
</tbody>
</table>

All the animals are birds, excepted the sea krait that is a snake (da Silva, 2017b)

Working with educational projects

Working with educational projects can bring much satisfaction both to the teachers who are involved and to their students. It brings a dynamism into the classroom, as it gives the participants the opportunity to construct knowledge from their own experiences. In order to allow the students to have positive educational outcomes from this educational project, all the activities were planned carefully following the following steps:

- The project does not work if the teachers use an authoritarian teaching style. It needs to be part of a democratic process that lets the students participate with their own ideas and suggestions, which can often take the project in a different direction from what the teachers had originally planned (Abrantes, 1995).

- The activities in the project need to give space for the students to learn by doing. They should be engaged in dialogues, debates, and discussions at all stages of the project. This gives a dynamic tension to the work and makes the activities more interesting to all the participants at the same time that it uses the students’ own curiosity to push them towards wanting to learn more (Prado, 2003).

- Projects tend to work best when discussions are closely related to the social and cultural reality of the students so that they are encouraged to propose interventions. This makes activities practical and functional, not just theoretical (Abrantes, 1995).

- It is especially important for the project to produce a final product, something concrete. This needs to be something that the students themselves have produced and that recognises their authorship (Valente, 1999).

- The whole school community should be involved, parents as well as other members of the community so that the experience of learning goes beyond the school. This will help to validate the students’ learning, to encourage others to learn, and to make the project more interesting for the students.
- It is important to remember that in an educational project, teachers are not just givers of information to the students. In this kind of learning, teachers need to be people who guide the students through different learning experiences and who participate in both the planning and the execution of the project along with the students. Even more important, they need to be aware that they, too, will be learning many things during the project (Moura & Barbosa, 2006).

These steps were some of the elements that shaped the design of this research, conducted by action research as a working methodology. In action-research the researcher does not act isolated from the participants, but together, submitting the results emerged during the practices to the whole group, providing a dynamic learning process (Graciani, 2014). It also emphasises aspects of horizontal methodologies, aiming to make possible the construction of knowledge through the intersection of knowledge and a more open dialogue with the participants (Daniel, 2012).

A step-by-step description of how the project was conducted

The central theme of this project was the birds of NIP. This topic was the focus of several practical workshops that used different techniques to explore stories, drawing and painting techniques, scientific reading, and English writing. Discussions looked at the diversity of birdlife in New Ireland and its importance to and influence on Nalik culture. Because the school is in a Nalik area that is organised into clans usually represented by birds, there are many traditional stories about these animals. These form an important part of the cultural heritage of this ethnic group and are valuable both to the students and the other members of the community.

In order to construct knowledge based on the students’ own experiences, the activities in this educational project were planned in such a way as to arouse their curiosity and encourage questions that could be answered through the activities that they carried out. To do this, I had to plan activities that made use of the students’ creativity and that were not necessarily the same as the way they were normally taught in class.

In this way, the students were free to suggest and create their own materials (texts and drawings) that were reactions to discussions that arose during the workshops. This process involved hands-on activities that went beyond just participating in group discussions, leading to better interaction and cooperation during group work. This contributed to the social and intellectual development of the students.

The main purpose of this project was to document the legends and myths Nalik people have about birds and to present these in a Nalik cultural context. This meant that I first had to collect these narratives. To do this I decided to ask the people who would know these best: members of the Nalik community itself, in order words, local residents and their leaders. For three weeks I interviewed ten people from the community, including teachers, maimais (clan chiefs), and elders, and met with larger groups of people at weekly village meetings in Madina and Luaupul. I asked them to explain certain aspects of the local culture, to share traditional local narratives related to the history of the region, and to identify birds that symbolise clans in the community. They were told that this information would be shared with children at their local primary school.
This first step was essential in developing the workshops and running activities. It gave me as an outsider some knowledge of the local culture and helped me to interact with the theme in an appropriate way. At the same time the community could become acquainted with the project that was going to take place with students at their school. I was rewarded with strong backing for the project by many leaders in the community.

The investigative process considered, in its various stages, a circular system where information about Nalik culture emerged from participatory and reflexive dialogue with village community leaders during interviews conducted between September 12 and October 8, 2016, and was used in interdisciplinary educational practices at the MPS school, throughout a workshop, *Storytelling - Our Book Project*, developed between October 5 and November 22, 2016. Through the workshop, narratives were built that documented information about the local culture. Then, between November 20 and 24, 2016, the narratives produced by the students were analysed by members of the community to validate these records. The diagram represented by Figure 1 shows in schematic form the main steps developed in this investigation.

During the phases developed in this research, the action research methodology, applied in the whole process, was understood to be both critical and transformative, enabling the establishment of a dialogue between participants and researcher within a system that allowed the exchange of knowledge, the intersection of knowledge, as well as intervention in and reflection on the proposed practices and actions developed. Thus, during the research, I considered some assumptions that would guarantee the collaboration of the participants so that they could make decisions, as well as interventions in the research process itself, and participate actively in the elaboration of instruments in the intervention actions and / or suggest modifications and evaluate the adequacy of previously planned activities.

![Diagram of the steps applied during this research](da Silva, 2017a)

As this research involves the documentation of cultural aspects of a particular indigenous group, I considered that the methodology proposed should enable documentation based on the voices of the participants, as well as prioritising the
subjects which they considered most important within their culture. Invisible groups, such as traditional and indigenous communities have knowledge that is not valued, and are excluded from the knowledge historically accumulated by mainstream society, so that there is a need to build knowledge belonging to the people with the people that allows for a more critical understanding that goes beyond the boundaries of letters and is constituted in social and historical relationships (Maciel, 2011, 328). In this sense, the investigative process was represented by an open and flexible plan where, during the progression of its stages, the hypotheses, problems and theories could be constantly reconstructed and complemented with the participants.

The Process of Interdisciplinarity

When we think of an educational project, it is important to think about the kind of activities that can access content knowledge in an interdisciplinary way. By this we mean content from different subjects that can touch on and explore different aspects of one theme. During the project that led to the production of *A Maani: Birds and Nalik Culture*, the theme involved more than just writing and producing texts in English. Students worked with a number of different subjects, including:

- Geography: important aspects of the local geography and of New Ireland as a whole, including its natural features and ethnic groups,

- Science: problems in the local natural environment, animals and plants found in the area, and the international scientific way of identifying and naming the birds representing Nalik clans,

- History: actions in the past that have influenced the present-day make-up of the Nalik community and how it is organised today, and

- Expressive Arts: drawing techniques that enable students to represent animals more vividly and naturally.

Besides these school subjects, the students also investigated various aspects of Nalik culture, collecting traditional oral stories, describing cultural events and symbols, and learning how to put these into a narrative. A suggestion by students as they consulted on how to present their texts was to use the correct Nalik terms for the names of animals and concepts from Nalik culture, followed by a translation and/or explanation in English, a technique that can be seen in the pages of the book. This helped students to become more familiar with classical Nalik terms that were unfamiliar to some of them who had a weak grasp of their ancestral language.

The workshop *Storytelling - Our Book Project*

The various exercises carried out over the course of this project were organised into four practical activities incorporated in a workshop called *Storytelling - Our Book Project*. In the classroom, I was able to count on the help of a linguist, Dr Craig Alan Volker, and a Maimai of the Moxokala Clan, Neil Gaalis, as facilitators during my

---

2 Adjunct Professor of the Cairns Institute, James Cook University in Australia; He was responsible for the, documentation and elaboration of a writing system for the Nalik language (Volker, 1998).
communication with the students, assisting with the elucidation of issues referring to Nalik terminology, Nalik culture, as well as the orientation and organisation of the groups during the several practices. During conversations with students, doubts often arose about the meaning and the etymology of some Nalik terms, or even the grammatically correct form of several words. One example was the form of Nalik writing of clan names. Students from the Luaupul Village wrote differently from those living at Madina, which was subsequently elucidated as being a problem related to the dialects used in these two regions. Thus, both forms were correct and were later included in the final production of the book.

The presence of both facilitators was also important during the correction of the texts produced by the students, making it possible to optimise the time spent in the classroom and the dynamics in the construction of the narratives, in which it was essential to attend to the students’ questions, allowing special treatment for those with some difficulties with writing (Figure 2).

Figure 2: Composition of photos showing students receiving orientations during the correction of their texts. (all photos: da Silva, 2016 - except the image to the left, at the bottom, captured by Volker, 2016).

The following is a brief description of each of the activities and how they were developed.

1. Storytelling

In this activity students could learn about the different styles of narratives used in legends and fairy tales, which were read to the students in English, accompanied with colourful figures illustrating the different parts of these stories. After first listening to the stories and then reading them in groups, students talked about their social importance as well as the messages and symbols in these narratives. After this, students drew pictures to illustrate a Nalik legend about the origin of their clans, which was included in the final book.
2. Technical aspects of books

In this stage, many books representing different literary genres were brought into the classroom. Students were asked to identify the different parts of the books and to comment on their similarities and differences. The main elements that make up a book, such as the cover, authors’ names, and technical requirements were also presented to the students. It was important for them to understand that there are rules governing the preparation and inclusion of these elements in a final publication. I also observed that the construction of the group book would be guided by these rules. Thus, the students were directed to think not only of the texts they would write, but also how to create all the elements necessary to make up a book.

3. Hand-made books

In this stage students had an opportunity to put into practice all the concepts and information they had been learning about.

Working in groups of no more than four people, the students were asked to write a simple story describing an event, telling a personal story, or re-telling a local legend. The topic was up to the group, but it had to deal in one way or another with “birds”.

As they wrote, the students were helped to correct their English style and grammar, and relevant rules about English usage were explained. After the texts were produced, the students were shown how to put these stories into small individual books, with covers, title pages, introductory material, and illustrations. After the individual pages were finished, they were stapled together and bound with colourful tape (Figure 3). Some of the stories and illustrations from these individual books can be found in the final book.
4 Working with texts and illustrations

As explained earlier, material such as narratives and traditional information had been collected earlier from members of the Nalik community. Working with this material, students discussed what they did and did not know about clans in general and their own clans in particular, as well as about the birds that represent them. They also identified these birds scientifically and learned about how the birds live, both from books and from what their elders told them.

After exploring the information that had been collected, we worked with students to decide which other texts should be written for the collective book. After much discussion, the group decided they needed texts describing the important characteristics of the Nalik people, the villages where the students live, their habits and customs. Then they described the Nalik clans and the birds that represent them.

The students again worked in groups. Each group had responsibility for producing one group text for the collective book. These texts were improved and re-written many times. The three teachers were available to make suggestions about English usage and the content of the texts. The texts were re-read many times until everyone was satisfied with the final results. The groups also produced drawings of the clan birds that illustrate this book (Figure 4). After they were finished, the texts were joined together and edited. The final text was shown to students for their approval and for any final corrections or additions.
The book *A Maani: Birds and Nalik Culture*

During the first two weeks of the workshop, at MPS, I proposed to the students to contribute themes that could be used in the development of texts to compose the collective book (see Table 2). This resulted in a first compilation of possible chapters and topics that, through the reflections that emerged during the practices developed in the classroom, would end up undergoing several modifications, until the final production.

In the final book, the topics chosen by the students were organised in sequential chapters in order to increase their coherence and structure, a strategy that allowed the expansion of the range of information about socio-cultural, historical and environmental aspects used in describing the Nalik group.
Next, I will present each chapter of the final book as it was organised after reviewing the suggestions provided by the students.

New Ireland Province

This chapter describes NIP, its location, wealth, and natural beauty. Here also the students highlight the cultural richness of this region represented by its 23 native languages, the Nalik language being one of them.

The Nalik area and our villages

The Madina and Luaupul villages are presented in this chapter through their biodiversity and places considered important by students. The animals, cited in English, also had their names translated into the Nalik language, a decision made by the students themselves and adopted for all the natural and socio-cultural elements present in this work. Here, too, some historical aspects, are inserted to describe the German colonial period between 1884 and 1914 and the Japanese invasion and occupation during World War II.

Nalik society and Nalik culture

Here the students specifically address the matrilineal social organisation of the Nalik group, their leaders and clans, and describe cultural elements present in the traditional memorial ceremonies known as malagan.
The Origin of the Clans

This chapter contains a traditional Nalik tale that explains the origin of the clans. The narrative was structured and complemented with seven illustrations made by the students;

Birds of New Ireland - Their importance for the environment and Nalik culture

The ornithological diversity of the NIP is addressed in this chapter, as well as its importance for the local environment and culture.

Description of the birds that represent the Nalik clans

Here each of the seven species of birds used as totem of the Nalik clans is depicted. Each animal is presented by its name in the Nalik language, accompanied by the vernacular name in English, and its scientific classification. In the description, information was searched in *Birds of New Guinea* (Pratt & Beehler, 2014), *Birds of Melanesia: the Bismarcks, Solomons, Vanuatu and New Caledonia* (Dutson, 2011) and *Indo-Pacific Coral Reef Field Guide* (Allen & Steene, 1998). During the workshop, this information would be complemented with traditional knowledge shared by community members and illustrations drawn by the students;

Other important birds in Nalik culture

In this chapter, five narratives are compiled that were shared during the Tell Us Your Story activity in the Hand-made Books workshop. These were selected by the students from among the various productions developed. Also included are four traditional songs, recorded during an interview with community members, with their respective translations and / or information on the subject addressed. All this material deals with themes related to several species of birds that live in the NIP region, showing the importance of these animals to the local culture.

About this book

This chapter describes the whole process involved in conducting the Workshop: Our Book Project. It also contains some guidelines for teachers and community members who wish to develop similar educational projects in their schools that consider the local reality, conducted in an interdisciplinary way and with community involvement.

Showing the project to the community and asking for validation

During the activities, the students and I made a timeline of the steps we were developing. At the end of every meeting with them, the students were asked to discuss and write together some paragraphs about the activities they had taken part in, what they had learnt that day, and what topics or questions they found especially interesting. This timeline was made with colourful paper and acted as a visual guide of the project, documenting and illustrating everything we had been doing. At the end of the workshop I brought the individual books the students had made together with the timeline and showed them to the weekly Monday community meetings in Madina and Luaupul villages (Figure 5). Parents and other community members showed great
interest in what the students had been doing and could see how the stories and information they had shared earlier contributed to the project.

Figure 5: Community members at Luaupul Village observing the material developed by the students during the workshop (photo: da Silva, 2016).

Because the topic of this book and of this project contained elements referring to the culture of an entire ethnic group, we thought it was also important to give the final text to several members of the community so that they could validate the vocabulary and content. Eight members of the Nalik community, including maimais and teachers, were asked to read and correct the texts. Based on their recommendations, some Nalik words were changed and some additional explanations were included.

Conclusions

The process depicted in this paper is the result of a dynamic collaboration between young students, community leaders, and a researcher from outside the community. It is an example of how educational projects can enrich students’ learning and be a way for small communities to produce literature to share their culture and local knowledge.

The use of action research, which enables several moments of dialogue and collaboration with the community, was fundamental in establishing a climate of trust and interest on the part of the members of the Nalik group. Among other potentialities mentioned by the participants, it prevented the production of decontextualised descriptions about local culture, a criticism mentioned by many community members in relation to anthropological research developed in the region that, according to them, end up portraying their customs and way of life in a superficial and misguided way.

The book *A Maani: Birds and Nalik Culture* (Figure 6), built through experiences and voices of these participants, compiles various aspects of Nalik culture as well as traditional songs and narratives, documented and described through the eyes of the
community. It also represents a set of information about this ethnic group, documented for the first time using their own oral narratives.

It exemplifies a practical-constructive model, for education contextualised within aspects of the local culture in the search for a possible dialogue that leads to the revaluation and acknowledgement of traditional knowledge and practices that are part of the identity of its members.

This research identifies a methodological process that could be replicated in other cultural contexts, such as with other groups in northern NIP with which the Nalik group has similarities in relation to social organisation in clans and the observance of malagan ceremonies. It would also be interesting to conduct a similar contextualised investigation in other indigenous and / or traditional communities. The reflexive and participatory process developed throughout this research can contribute to the empowerment of the community in the maintenance of its cultural identity, since it provides a space for a deep discussion of these elements, by the community itself.
References


Contact email: clau.smith@gmail.com