

# A Cultural and Cognitive Approach to the Study of Melanesian Ritual Music

RAYMOND AMMANN  
*Hochschule Luzern - Musik*

## Abstract

*Ethnomusicologists specialized in Melanesian ritual music concentrate their research mainly on the performed music, without contemplating its structural connection with rhythmic features – neither in terms of group movement or dancing nor in relation to song texts. However, there is more and more evidence that the combination of music, movement, and text creates the perception of strong emotions and that cultural knowledge, transmitted by the ritual, is responsible for the strong emotions of participants who feel a communication with the spirits of the deceased ancestors. To create such strong emotions, it is necessary for participants to “read” the signals and information transmitted through music and dance. These signals and information are part of the cultural knowledge, including belief system and myths. People who do not understand these signals might not be able to feel the strong emotions that lead to a communication with the ancestor spirits.*

**Keywords:** Melanesia; ritual; ceremony; sway; emotion.

## Un approccio culturale e cognitivo allo studio della musica rituale melanesiana

*Gli etnomusicologi specializzati in musica rituale melanesiana concentrano le loro ricerche soprattutto sulla musica eseguita, senza tener conto del rapporto strutturale che esiste tra questa musica e certe sue caratteristiche ritmiche, sia in termini di movimento di gruppo o di danza, sia in relazione ai testi delle canzoni.*

*Tuttavia ci sono sempre più dati che provano che la combinazione di musica, movimento e testo porta alla percezione di forti emozioni e che proprio le conoscenze culturali, trasmesse dal rituale, sono responsabili delle emozioni che provano i partecipanti creando in loro la sensazione di poter comunicare con gli spiriti dei loro antenati.*

L'Uomo, vol. XI (2021), n. 1, pp. 167-192

*Perché nascano tali emozioni è necessario che i partecipanti possano “leggere” i segnali e le informazioni trasmesse tramite la musica e la danza. Questi segnali e queste informazioni fanno parte della conoscenza culturale, come anche il sistema di credenze e i miti. Le persone che non capiscono questi segnali potrebbero non essere in grado di provare le forti emozioni che conducono alla comunicazione con gli spiriti degli antenati.*

**Parole chiave:** Melanesia; rituale; cerimonia; *sway*; emozioni.

## Introduction<sup>1</sup>

In Melanesian ceremonies, ritual communication between the participants and the spirits of the deceased ancestors involves group dancing (movement), the performance of specific music (rhythms/musical motifs) and in certain cases the dissemination of texts (language). These three channels convey cultural knowledge and generate strong emotions for the participants. Although all participants might feel strong emotions during a ceremony only the persons with the specific cultural knowledge and roots in the Melanesian belief systems transform those emotions into a physical reaction that results in the perception of the presence of the ancestors' spirits or of being transferred to the world of the ancestors. In the latter case, the ancestor spirits do not spiritually travel to the world of the living, but rather, the living descendants travel spiritually to the world of the ancestors.

There are two theoretical and methodological directions to address this phenomenon. On the one hand, it is necessary to approach the audio-visual structures of Melanesian ceremonies as forms of ritual communication that send out cultural knowledge and enable the interpretation of the semiosis (Wassmann & Kluge & Albrecht 2011: 51). This includes an ethnomusicological and ethnochoreological analysis of music and dance and the relevant interpretation of the results. On the other hand, an approach through cognitive studies is necessary, as cognition is deeply involved in the creation of strong emotions through music and group movement such as dancing (Altenmüller 2005: 140).

There is no fixed rule for the application of the terms “ceremony” and “ritual”. Goffman (2013: 319, translated by the author) describes ceremony as a «highly specified, comprehensive sequences of symbolic actions»<sup>2</sup>

<sup>1</sup> I like to thank the two anonymous reviewers for their indications, Renato Corzani for the translation of the abstract and Natalie Kirschstein for checking the English.

<sup>2</sup> «höchst spezifizierte, ausgedehnte Sequenz symbolischer Handlungen» (Goffman 2013:19).

whereas Grimes (2013: 117), in the same volume, sets ritual as a generic term, which comprises “ceremony” as an event between groups with political meaning. For this article, I will analyze some large-scale ceremonies in Melanesia that can last up to several weeks and might unite more than one thousand people. These ceremonies contain events, each with their own symbolic expressions and meanings. I refer to such events as rituals in their own right.

Form and function of music in Melanesian cultures change the faster transcultural processes with non-Melanesian cultures take place. Still, none of the ceremonies referred to here developed into cultural festivals as a touristic attraction. Although some visitors might be present during the ceremonies, the structure and form did not assimilate to touristic preferences. Today, most of the ceremonies that will be analyzed here are carried out by persons who refer to themselves as Christians<sup>3</sup>. This form of Christianity does not exclude the belief of the spiritual existence of deceased ancestors in connection with a certain kind of animism.

If we look at early descriptions of ritual music by Bateson (1936), Malinowski (1922), Speiser (1923), Leenhardt (1937), and Sarasini (1929), as well as some of the earliest recordings from Rösicke (1914), Thurnwald (Schneider 1969), or Pösch (Graf 1950: 86) and compare them with more recent observations and descriptions we realize that ritual music and dance did not change as dramatically as other – more secular – musical styles. Ritual music provides some constants in these rapidly changing cultures, although the cultural importance of the rituals or ceremonies might have changed since the time of these early descriptions.

Music and dances in Melanesian ceremonies are as diverse as the variety of Melanesian languages and they differ in their structure and connotation from one region to another. Each Melanesian region and island developed its own economic, cultural, and social life according to historical influences as well as geographical and social conditions. Major changes took place after First Contact, mission and colonization. Each Melanesian society, from the Highlands of Papua New Guinea to the Île des Pins in the South of New Caledonia reveals its cultural uniqueness. However, the aim of establishing a connection to the spirits of the deceased ancestors’ world seems to be dominant in all large-scale ceremonies, even when the

---

<sup>3</sup> Except of the interior of Tanna Island in the South of Vanuatu where the people are not Christianized.

main reason for the ceremony is some other function, such as the building or confirming of alliances, climbing another step in a hierarchical system, exchanging of food etc.

Melanesian musical instruments belong mainly to the groups of aerophones (flutes, panpipes, trumpets), idiophones (slit drums, rattles etc.) and a few membranophones (the drums *kundu* and *timiatwos*) and they show a large diversity within each group (Fischer 1983; McLean 1994; Ammann 1997, 2012). Singing, most often in a heterophonic style, is common and often accompanied by drumming and in connection with dancing. The texts of the songs performed for ceremonial reasons are sometimes in a language that is not or no longer known or in esoteric metaphors and often the singers do not know the meaning of the song words. In other songs the text contains significant semantic information and can be interpreted. Well-prepared dances are either in row or line form and their choreography must be learned when preparing the ceremony. They are mostly of the imitative type, whereas the round dances unite all participants and sometimes visitors and there is no learning phase involved.

### Relevant theories on music and emotions

For the analysis of Melanesian ceremonies, it is of advantage to understand them as dramas (Rappaport 1999: 134), especially in regard of musical and choreological elements and their interoperation, which is responsible for the creation of emotional peak moments. For an analytical evaluation of such moments, the structure of the ceremonial music and dance as well as the song meanings<sup>4</sup>, gestures and group movements must be considered without neglecting this interrelationship. It is important for the information communicated with the music or dance structure to be understood by the participants, again highlighting the importance of familiarity with the relevant cultural knowledge.

Rhythmic group movements (dancing) create a unifying sensation, which counts as one of the most important connotations of a ritual (Durkheim 1912) and at the same time generates strong emotions, especially when performed in relation to the rhythm of the music. Accord-

---

<sup>4</sup> As mentioned, the meaning of ceremonial songs is often obscure. Thus, analysis of song words to gain an inside of the song's content is only possible in certain cases.

ing to many practitioners with whom I discussed this phenomenon, this rhythmical mass movement enforced by the music can culminate in sensing a connection with ancestor spirits. Gabrielsson names this kind of strong emotion «transcendental» (Gabrielsson 2011: 390)<sup>5</sup>. In his large-scale study of strong experiences with music, he divides the various emotional reactions of 965 people in Europe (Sweden) to various kinds of music styles in several categories (Gabrielsson 2011: 373). Within the transcendental experiences he identifies experiences that are «labelled supernatural, magical, mysterious, occult, extra-terrestrial, heavenly, or spiritual» (Gabrielsson 2011: 390), as well as ecstasy or trance, and the “out-of-body” experience: «The most spectacular examples of quasi-physical experiences are so-called out-of-body experiences» (Gabrielsson 2011: 376). Those interviewed reported «feeling lighter than usual or even weightless, they were taking off from the ground, hovering or floating above the surroundings, feeling as if one leaves one’s body and observes oneself from outside...as of one finds oneself in a completely different place from usual» (Gabrielsson 2011: 91). Besides the transcendental experiences the religious experiences would partly refer to the feelings of some participants of Melanesian ceremonies. Gabrielsson explains that these are descriptions «of how the music gives rise to visions of heaven, life after death, paradise, or eternity» (Gabrielsson 2011: 391). It is questionable to compare the feelings of Melanesians participating at a ceremony with Swedes listening to various kinds of music. The persons in Sweden were referring to the Christian religion which differs from the belief system in Melanesia of which Christianity is only one part. Furthermore, such a comparison would assume that the same emotional reactions to music is a universal. However, while it may not allow for an equalization between the two examples, Gabrielsson’s study does offer a comparative view. Judith Becker (2004) refers to this fact of particularities and similarities in music and emotions in her book *Deep Listeners*. She approaches the phenomenon of music and trance from a rather music cognitive side and describes the relationship of trance and music as follows: «Emotion and music and trancing viewed as evolving together in the interaction of each individual with performances dissolves intractable dichotomies concerning nature versus culture, and scientific universalism versus cultural particu-

---

<sup>5</sup> Although there might be other more ethnographically suitable expression, I will use Gabrielsson’s term in reference to his research.

larism» (Becker 2004: 129)<sup>6</sup>. The *Handbook of the Sociology of Emotions* states «Rituals generate group emotions that are linked to symbols, forming the basis for beliefs, thinking, morality, and culture» (Summer-Effler 2006:135). Thus, rituals unite cultural knowledge and emotions and furthermore, they create a feeling of security and order in interpersonal relations (Huxley 1966; Eibl-Eibesfeldt 1984, 552ff; Senft 2014, 80ff). For the ceremonies in Melanesian rituals and other forms of communication transmit cultural knowledge and at the same time, cultural knowledge is necessary to understand these signals. Cultural knowledge in this sense can be describes as values, norms, world view etc. that are explicitly and implicitly learned through being part of a culture or being familiar with it and might also function as an identity marker. Further, cultural knowledge is dependent on the mind, which is how humans organize their reality and in this way their acoustic surroundings.

The songs, music, dances, and other rhythmic and gestural movements in Melanesian ceremonies must be understood as distinct and complex forms of ritual communication as defined by Basso and Senft.

[R]itual communication is artful, performed semiosis, predominantly but not only involving speech, that is formulaic and repetitive and therefore anticipated within particular contexts of social interaction. Ritual communication thus has anticipated (but not always achieved) consequences. As performance, it is subject to evaluation by participants according to standards defined in part by language ideologies, local aesthetics, contexts of use, and, especially, relations of power among participants. (Senft 2014:896)

For human ethologists, gestures belong to the class of expressive movements which they define as «behavior patterns that have undergone distinctive differentiation in the service of signaling» during processes of ritualization (Eibl-Eibesfeldt 1984: 438). They point out that any behavioral pattern can become such a signal either over the course of evolution or because of conventions that are valid within a specific community in which these signals are culturally transmitted and acquired. These signals may be physically determined concomitant phenomena of an emotional state, or they may be behavior patterns that fulfill a specific function, like forms of friendly bonding behavior. When behavioral patterns become ritualized

---

<sup>6</sup> Although the participants of Melanesian ceremonies say that they travel to mythical times or that they feel the presence of the ancestors, they do not really fall in a trance.

and are thus developed into signals, they undergo changes that make the signal more prominent and unequivocal to improve its communicative function. During these ritualization processes the movements are usually simplified and often repeated rhythmically, often getting exaggerated, while they either vary with respect to their intensity or are executed with a typical intensity (Senft 2014: 80). This makes the behavior of interactants predictable – at least to a certain degree – and with this increase of the predictability of human behavior rituals provide security and order in human interaction. Signals of ritual communication in Melanesia are understood by the persons (mostly men) who were initiated in esoteric and mythical secrets. It is very probable that such experts invest more mnemonic effort, as they dispose of a differentiated “mental map” than the other members of the society. They are regarded by others as leaders and these others might follow the leaders’ behavior patterns even if they do not understand all of the multilayered information (Senft 2014: 80). The amount of cultural knowledge that a person displays depends on various factors; one certainly is their position within the society. Baddeley et al. (2009) refer to «simplified worlds» as prototypic schemata that are at least partly shared by all the members of the same culture. Such schemata function as a mental model that organizes knowledge and intellectual capacities in stereotypic and prototypic sequences of thoughts and actions based on repetitive experiences of everyday practices (Whitehouse 1996).

For experiences of everyday practices, Marcel Mauss (1923) provides an ideal example. He argued that reciprocal exchange (*échanges dons-contre-dons*) is one of the most important cultural features in Oceania and functions as a guarantee of the society’s perpetuation. Thus, reciprocity determines social life and is deeply seated in the thinking of the people. It is one of the frequent signals used in Melanesian ceremonies. That this reciprocity is symbolized in music, dancing, and visual organization of ceremonies in Melanesia seems to be obvious. However, these one-sided approaches for a ritual analysis do not allow for the understanding of the transcendental or metaphysical experience of the Melanesians when they sense the presence of the ancestor spirits. A versatile approach is necessary, one which takes into account all information of cultural knowledge. As culture depends on the mind, in which humans organize their knowledge of the world in the long-term memory (episodic memory), it is important to approach this problem from the cognitive side as well. Music and dancing are temporal art forms; comprehending them therefore requires

«not only an act of memorization, but also a constant effort to link past to present in a relationship that is ultimately of an intellectual rather than perceptual order» (Imberty 1969: 115). Music and dance transport schemata and signals and at the same time they create strong emotions and – in the case of Melanesian ceremonies – they might create the feeling of communication with deceased ancestors.

I often participated in Melanesian ceremonies, but while I did feel strong emotions, I did not experience a connection to spirits. I talked to younger Melanesians living in the towns who participate only rarely in ceremonies on their home island or region, and they confirmed that they feel strong emotions but not the presence of ancestor spirits. This brought up the idea that the physical reaction of strong emotions (communicating with ancestor spirits) demands a certain cultural knowledge, transmitted by ritual communication itself, as well as the required cognitive capacity to develop this inspirational experience that is felt by well-versed participants of ceremonies from the South of Melanesia to the North.

To pursue the question of whether this metaphysical experience depends not only on the mass movement and music but also on cognitive premises and cultural knowledge, I will concentrate on ceremonies from the following Melanesian cultural regions: North of Grande Terre (New Caledonia), Tanna (Vanuatu), Trobriand Islands (PNG), Finisterre Mountains (PNG), and Middle Sepik (PNG). The research carried out so far by the author and colleagues in these regions has revealed multiplex structures of the overall music, dances, and song lyrics.

### *Nyäbi* and *ayoi*, songs of the Grande Terre (New Caledonia)

Because of Christian missions and colonialism most of Kanak<sup>7</sup> culture has fallen into oblivion; the dances and songs that are still performed today show only a small part of the once rich Melanesian culture of New Caledonia (Ammann 1997:10). The large exchange ceremonies described by early visitors (La Hautière 1869: 238, Lemire 1884: 110 and others) that brought together several thousand participants and lasted up to a few weeks are generally called *pilou-pilou* today<sup>8</sup>. For the missionary Maurice

---

<sup>7</sup> Kanak: self-designation of the Melanesians in New Caledonia.

<sup>8</sup> In the various languages of the Grande Terre of New Caledonia several names refer to this ceremony (Ammann 1997:56).



Leenhardt (1937: 162, translated by the autor) it was a «social ceremony of reconciliation around which all indigenous life gravitated»<sup>9</sup>. Leenhardt divides the ceremony into three phases: the first phase included the ritual welcome and presentation of the guests; the second phase constituted the exchange of large amounts of food; and the third phase consisted of a huge round dance that formed the most emotional moment of the ceremony. This dance is still performed today and still lasts from dusk to dawn, but the participants are much less emotionally engaged. At the time of Leenhardt's stay (in the first forty years of the XX century) and before that, the round dance was the moment in the ceremony when the emotions were at a peak and the presence of the deceased ancestors was felt (Leenhardt 1930: 171). During field research from 1992 to 1998 some elder people told me that they still feel the presence of the ancestor spirits, however, at the last visit in New Caledonia (February 2019) none of the younger interviewees stated that the emotions were leading them to this concept. This raises the question of whether the changes in lifestyle and the loss of cultural knowledge, including belief systems, are responsible for the different modalities of emotions that are generated by participating in this public dance?

The round dance, in which the participants walk/dance around the singers and percussionists, is still led by the same songs (generally called *ae-ae*) and accompanied by percussion (Ammann 1997: 65). A detailed analysis of the songs called *ayoi* from the language zone Hoot ma Whaap in the north of the Grande Terre<sup>10</sup> shows the complex structure of the songs (Ammann 1997: 134). The Kanak<sup>11</sup> who perform these songs distinguish between the melody, called *geen kot* (timbre of song) and the lyrics called *pae kot* (edible root of song). For the performance of the *ayoi* two singers alternate and their singing is accompanied by a group of men playing on the percussion instruments *ndo* (stamping bamboo) and *bwanjep* (bark clapper). The percussionists are divided into two groups of different size, which strike in alternation, always for one beat, creating a regular pulsation of strong (larger group) and weak beats (smaller group). The musical phrase *geen kot* can be divided into two similar parts A and B. Each part

---

<sup>9</sup> «cérémonie sociale de propitiation autour de laquelle gravite toute la vie indigène» (Leenhardt 1937 :162).

<sup>10</sup> Grande Terre: The main islands of New Caledonia.

<sup>11</sup> Kanak (without the ending s) is singular and plural form.

ends with the exclamation *ia-ii* intoned on the same pitch, otherwise part B is in general intoned a neutral third lower. The parts with the same text are performed in a complex repetition system creating a period of four that is connected to the alternating system of the singers' solos and duets. For the two singers there are three possible performing styles: a) solo of singer I; b) solo of singer II; c) duet of singers I + II. The performance is in fact a result of a combination of period four (musical phrase) and of period three (alternation of the signers) (Ammann 1997: 139). This structure in the song performance is more complex than the accompanying percussion, but both are built on alternation. The form of the *ae-ae* songs from other regions of the Grande Terre differs from those of the *ayooi*, but in all cases the main structural feature is the alternation, which creates a kind of repetitive swaying.

Whereas the lyrics of the *ayooi* (those that are still known) refer to personal feelings of the composer, the *ae-ae* song named *Tchamba* from Poindimié refers obliquely and in only a few words to a mythic migration, by naming toponyms (rivers, mountains etc.). The song *Tchamba* refers to the journey of the mythic founder of the *dui* and *bai* moieties. The journey starts at a place called *Tchamba* and ends at a place further north called *Poyes*. On this journey, some of the mythical protagonists stayed at certain places and so named the region's geographical features such as valleys, mountains, and rivers. The song divides the journey into several legs and each leg is represented in the song by one verse and its repetition. Each verse consists only of the name of the geographical place, where the clan founder settled, followed by neutral<sup>12</sup> syllables. The order of the verses corresponds to the direction of the migration: *Tchamba*, *Wiindö*, *Tié*, *Wagap*, and finally *Poyes*. This song identifies a part of the east coast of the island and at the same time, it is a reminder of histo/mythical events upon which – today – land claims are based. A listener without this specific cultural knowledge cannot make the connection to the mythical journey but for listeners with the cultural knowledge, the song reminds them of the local history and of the origin of their lineages. The lyrics of the song *Tchamba* make direct references to the mythical times and the complex alternating system of the *ayooi* mentioned above refer to ways in which Kanak interpret their social life, their history, and their environment. Performed while dancing all night in a monotonous way, this structure is physically felt by

---

<sup>12</sup> Neutral syllables: ae-ae-ou-ou, syllables without a meaningful expression.

the dancers, and participants with the cultural knowledge might feel the presence of the ancestor spirits or feel themselves being “beamed” into the mythical times.

After more than 150 years of being politically connected to the Republic of France and after having partly adopted French lifestyle and Christian religion, many Kanak and especially the younger generations have lost much of their Melanesian cultural knowledge. As some told me, they feel a strong unifying emotion when participating in a round dance accompanied by *ae-ae* songs but it neither creates the feeling of connection with deceased ancestors. In discussion with some of these young persons, it became evident that they lack the deeper knowledge of the meaning of the dances and songs, which might account for why they do not experience the same emotions as their fathers or grandfathers.

### *Nekowiar* on Tanna (Vanuatu)

The *nekowiar* ceremonies on the island of Tanna in the south of the Republic of Vanuatu are as voluminous as the New Caledonian *pilou-pilou* ones were, however, unlike the *pilou-pilou*, the *nekowiar* is still performed today and I was able to participate in several of these ceremonies<sup>13</sup>. Societies on the islands of southern Vanuatu are characterized by an inheritable chieftainship system and the ceremony *nekowiar* not only constitutes a Melanesian exchange ceremony but also celebrates the chiefs and the communities. The moment when people say they feel the presence of the ancestor spirits is primed by strong emotions created by rhythmic singing and group movements.

The basic content of the ceremony can be explained by the words of Bonnemaïson (1994: 148): «The *nekowiar* ritual follows straightforward rules. One group invites another to dance the *toka* on its territory; it itself dances the *nao* in honor of its guests». Besides the dancing the giving away of pigs and kava plants from the hosts to the guests is a major function of this ceremony. After a preparation for one or two yam seasons, the ceremony itself lasts for two to three days (*nuehrapen*). The two partner groups

---

<sup>13</sup> During the years I lived in Vanuatu and during my later visits participated in several *nekowiar* ceremonies. Although a generation might pass between the same constellation of the participating group, other groups might perform a *nekowiar* in between. In reference to the entire island, in the last two decades there might be a *nekowiar* each year or every second year somewhere on the island.

perform their dances (*toka*, *nao* and others) and songs and present the guests with pigs and kava plants with the roots<sup>14</sup>. The guests will return a smaller amount<sup>15</sup> of food twenty days later in a less spectacular ceremony (*menuk*) (Ammann 2012: 275).

The music and dancing for each *nekowiar* is created anew by the person within each of the participating groups who has the gift to receive songs from the ancestor spirits. In this case, the lyrics of the songs are of less importance, some song parts refer to the dance gestures carried out by the singers/dancers and other parts refer to personal experiences. However, the choreographic movements of the general dance part are symbolic for the exchange. For example, the dancers of the guest group perform the dance *toka* where each participant holds a two-meter-long stick (*nasko*) with a hook at one end and carries out pulling movements signaling the drawing of the presents (pigs and kava plants) to their side. From the arrangement of the groups on the ceremonial place (*imwarim*) down to the smallest choreographic gesture all things signal cultural knowledge. According to interviews with people from Tanna, the moment when they feel the strong emotion is early in the morning when the guests march on their place to perform the *toka* dance. Up until then and during the entire night, the women show their dances and hundreds of guests from other parts of the islands sing and shout a short musical theme starting slow and then accelerating as they move faster (*kaua*), which creates a kind of undulating or swaying motion. During this night, amorous adventures are allowed, and, according to general opinion, the blood of the pigs that will be killed at the ceremony will equalize this “breaking” of the social rules. When the *toka* dancers arrive on the *imwarim* the boisterous joy of the night changes to a respectful silence. The joy of the participants expressed in mass movement while the women perform their dances is transformed into a calm emotion and paying respect to the ancestors and the chiefdom. The change of the atmosphere on the *imwarim* by the arrival of the *toka* dancers indicates the change from chaos to order (Bonnemaïson 1987: 108; Ammann 2012: 287). According to many talks with Tannese on this topic, the arrival of the *toka* dancers is the moment of strongest emotions, when they feel the presence of the ancestor spirits. The

---

<sup>14</sup> *Kava*: a tranquilizing drink made of the roots from a plant (*piper methysticum*). On Tanna, men drink kava every evening as part of a ‘small’ ritual.

<sup>15</sup> The difference will guarantee an ongoing of the exchange because these debts will be equalized by a reciprocal ceremony several years or even generations later.

combination of the understanding of all signals of ritual communication together with the wild overwhelming joy of the rhythmic shouting and mass movement creates identity among the participants, as they are the group of the persons who can read these signals and feel the strong emotions.

### *Nsaguo konggap* in the Finisterre Mountain range (Papua New Guinea)

Each Yupno in the Finisterre Mountain of Papua New Guinea “owns” a very short melodic motif of a few seconds called *konggap* (“death spirit’s voice”). This short melody stands as an acoustic symbol or name for the owner, and it accompanies that person (man or woman) throughout their entire life. A Yupno must sing the *konggap* of the landowner when nearing that person’s garden, bush area, or house to signal that they are familiar with the local custom and belong to the community. In this manner, the visitor identifies themselves as a Yupno and a friend, since foreigners would not know the relevant *konggap*. Relatives and friends may also sing the *konggap* of a deceased person as a sign of sorrow. The fact, that the Yupno can remember an astonishing number of *konggap*, was studied by the author and colleagues (Niles 1992; Ammann & Keck & Wassmann 2013; Wassmann 2016). In the morning and evening when people walk from the house to the gardens, one can hear these concise melodies from all directions and right across the valleys. In this manner the landscape turns into a local acoustic signal and singing a *konggap* creates a strong feeling of togetherness. Thus, knowing how the *konggap* system works and knowing a large number of these motifs is a form of cultural knowledge and functions as an identity marker to differentiate the locals from neighbors and foreigners.

In general, it is rude and boastful to sing one’s own *konggap*; but at the ceremonial dance called *nsaguo konggap* (*nsaguo*: bird with precious feathers) this is allowed. Each of the dancers (all of whom are male) sings his own *konggap* repeatedly all night long until he feels the presence of the ancestors. The men are decorated and carry an umbrella-like structure, *nsaguo*, representing the world tree (*kwombu*) and move in a counter-clockwise circle, bending alternating knees with each beat of the accompanying *kel konggap duwang*, a large *kundu*. The beats of the drum rhythmically organize the formally diverse *konggap* and create a kind of repetitive undulating accompanying sound «a multipart mass of asynchronous vocal sound, unified by a common *kundu* rhythm and synchronous dance steps» (Niles 1992: 155). The dance must last until dawn and for the Yupno this

is the time when their ancestor spirits, *kong*, move into the world of the living. Again, it is the combination of the cultural knowledge of the *kong-gap*, which also serves as an identity marker, and the rhythmic guidance by the beats of the *kundu* that creates a certain swaying movement that is responsible for the creation of that feeling.

### *Wosi milamala* of the Trobriands (Papua New Guinea)

On the Trobriand Islands, the *wosi milamala*, the songs of the harvest festival that are also sung after the death of a Trobriander and during the first mourning ceremonies, constitute the *biga baloma* or *biga tommwaya*, the “speech of the spirits of the dead” or “old peoples’ speech”, an archaic variety of *Kilivila*. Only a few of the elderly living in the Trobriands still know the meaning of these songs, although they are passed on from members of the older generation to a few interested members of the younger one. The speech variety is highly endangered if not moribund (pers. com. Gunter Senft: September 2019).

For the Trobrianders, the most important event in the year is the period of harvest festivals that were first described by Malinowski (1935). This period is called *milamala*, and it used to last for almost three months. Since the mid-1990s, the Milne Bay government and the Council of Chiefs in the Trobriands have been trying to cut the *milamala* down to just one day and one night (pers. com. Gunter Senft: September 2019). This development illustrates that, especially in the present time of globalization, the ritualization of culture can be manipulated. It seems that this manipulation preferentially affects highly complex and extraordinary forms of ritual communication which, as in the case of the harvest festival, preserve in a specific way important aspects of culture, in this case the Trobriand Islanders’ indigenous eschatology.

Based on the decision of the village chief, the important garden magicians, and the expert dancing instructor, the villagers first formally present yams, taro, sweet potatoes, fish, sugarcane, and betel nuts to the *baloma*, the spirits of the dead, just before sunrise. This food distribution is called *katukaula* and Trobrianders believe that at this time the *baloma* leave their “underworld paradise” on Tuma Island and visit their former villages. After some final magical rites in which the village dance master whispers powerful spells on their bodies to make them dance more gracefully, the dancers gather at the center of the village, where a group of mostly elderly men,

some with drums and some with long sticks, awaits them. Then the Trobrianders open the *milamala* harvest festival with a cycle of festive dances accompanied by drums and songs – the *wosi milamala*. They consist of verses of two to nine lines each, that are repeated ad libitum and have a characteristic melody. The singing and dancing may last for more than three hours. The *milamala* songs are sung in the language of the *baloma*, which represents the speech of the ancestors, the “old people” as a salute to the spirits of the dead, honoring and celebrating them.

The songs are verbal manifestations of the Trobrianders’ belief in an immortal spirit, the *baloma* that lives in a kind of “paradise” in the underworld of Tuma Island (Malinowski 1974; Senft 2011). The songs poetically and erotically describe the “life” of the spirits of the dead in their Tuma Island paradise. As mentioned above, Trobriand Islanders believe that these spirits visit their former villages during the *milamala* period.

Until the mid-1990s, the *wosi milamala* were also sung in the late evenings during the harvest festival, and sometimes they formed the transition from one day to the next<sup>16</sup>. The songs reminded Trobrianders of the presence of the *baloma* who also control whether the villagers living there now still know how to garden, how to celebrate a good harvest, and how to behave even while celebrating exuberantly. «Depending on whether or not they are pleased with what they see, the spirits enhance or hinder the next year’s production» of yams (Damon 1982: 231). Thus, the guardians of the norms of the past are present, checking whether that past was still present in their former villages. The *baloma* must not be offended by unseemly and indecent behavior, which includes jealousy among bachelors. Thus, the past is present during the *milamala*, and the present during this period is deeply anchored in, and must be similar to, the past. The singing of *wosi milamala* assures the community that there is a virtually transcendental regulator controlling its members’ behavior and thus warding off developments that might prove dangerous for the community. These features of *wosi milamala* are central for the characterization of ritual communication and the understanding of these rules and regulations is part of cultural knowledge.

The end of the harvest festival is still officially and publicly marked, and the festival ends with the villagers, especially the youngsters, chas-

---

<sup>16</sup> This period was characterized by conviviality, flirtation, and amorous adventures. During such festive periods, social norms, rules, and regulations were interpreted more liberally and generously than at other times.

ing the spirits of the dead back to their Tuma underworld by throwing stones, sand, and rotten coconuts and yams toward the invisible *baloma*. The “past” which was present until then in the villagers’ consciousness, is thus chased away. This rite clearly signifies that ordinary time, with its clear separation between past, present, and future, takes over again (Senft 2009, 2011). Although the lyrics of the *wosi milamala* have been notated and its content analyzed with regard to ritual communication (*ibidem*), the melodic and especially the rhythmic structure of these songs need to be analyzed to find out if there is a structure that might psychically and physically help create strong emotions. For the moment it is safe to point out that the singing of and listening to the songs unites the participants and helps to bring the spirits of the deceased ancestors to the world of the living. Although not understood fully by everyone, the songs themselves symbolize cultural knowledge.

### Sagais flutes of the Waxei (Papua New Guinea)

Yoichi Yamada’s analysis of ceremonial flute music<sup>17</sup> and songs in his book *Songs of Spirits* (Yamada 1997) is based on his field research in the community of the Meska (of the Waxei people) at the Korosameri River, which flows down from the Highlands into the Sepik River. The occasions to hold important ceremonies for the Waxei are the inauguration of a new house or any other moments when the owners of the flutes or songs feel inclined to do so. In all these ceremonies, establishing a connection with the ancestor spirits is the major purpose.

A flute performance begins in the evening after dark, when the men start to play the instruments in the forest and then walk, protected from the view of women, to the men’s house and climb up to the upper floor. The first part of the music (*tageya tuwas*) is repeated many times until Sagais, the presence of the spirit of the flute, is sensed by the men as a soft breeze, Sagais’ breath, which goes inside the bamboo. During breaks in the performance, a man receives from Sagais the melody for the following piece of music (*bittagas*). He hums the outline of the music to his colleagues and then the music is played on the instruments. It is the spirit that

---

<sup>17</sup> Yamada does not use any of the terms, ceremonial, sacred or secret flutes, but refers to the instruments as bamboo flute orchestras or to the individual instruments as bamboo pipes/flutes.



inspires the flautists, who for their part can only play what Sagais wishes them to play. The different melodies of the flute are thought to represent different moments in the myth of Sagais. During a performance only the last part (*sigaxus*), which is repeated several times, and the first part of the performance (*tageya tuwas*) are controlled by the men, the rest of the music is Sagais' will.

The music of the flute ensembles is arranged in four parts (*ibid.*: 207). Each part is played by flutes of differing length and the four sounds are set in two groups. The sounds of the higher pipes are called *yabangu* and the sounds of the lower pipes *yogoq*. For Yamada «The structure of each song is based on the alternating motion...» (*ibid.*: 208). The men who play the flutes say that in the music is “sway” (swaying). The notion of sway is not only in the ceremonial flute music but also in the ceremonial songs of the Waxei (*ibid.*: 152). The songs performed by men and women consist equally of high voice (*yabangu buseis*) and low voice (*busei yogoq*). «The four kinds of voices constituting a song are divided in half: *yabangu* “high voice” and *yogoq* “low voice” [both consisting of two separate voices, the author], and, by the entwining of these two different voices, dynamic aspects of sound such as ‘sway’ and “swell” are brought forth» (*ibid.*: 248).

To summarize we can cite Yamada: «Myths are a source of people's world cognition and also a model of the actual world. It is by virtue of their mythical thought, sensibility, and imagination that people can recognize the power of spirits as a shadow, perceive their low-breathing sounds, and socially accept the spirits' talk» (*ibid.*: 247). Yamada refers here to parallels of music and the cognitive processes, as we have mentioned for the Yupno. The music is performed while walking in a circle during long nightly hours. The spirit in this case moves into the instrument and the spirit's presence is not only felt by the participants, but also dictates their music. On the one hand, the sounds call the spirit and on the other hand, the same sound represents the voice of the spirit.

### **Ceremonial music of the Iatmul at the Middle Sepik (Papua New Guinea)**

The most important kinds of ritual music of the Iatmul people at the Middle Sepik (Papua New Guinea) are that of the side-blown pairwise-played flutes, the beating of the slit drums and the song cycles. These different forms of music might be performed simultaneously but even in this case,

they are musically independent. Research carried out so far (Spearritt 1979; Wassmann 1991; Ammann 2011) reveals that all three kinds of ritual musical performances are structured according to models that are evident in the Iatmul society and which are part of the cultural knowledge and cognitive processes of the Iatmul. For the following discussion, I choose the ritual music of the West-Iatmul, known as “Nyaura”.

### *Wabi of the Iatmul*

Ceremonial flutes of the Nyaura (and of the Iatmul in general) can measure up to 2.5 m in length and have no finger holes, they are played in pairs of uneven length by two musicians facing each other (Ammann 2011: 156). The difference of length is such that the interval of the two fundamental tones is approximately a major second, thus the harmonic scales of the two flutes (generally from harmonic II to harmonic VI) do interlock. For an in-depth study, the piece named *Mariuamangi* (McLennan et al. 1981 LP) of the Nyaura people is suitable – other pieces, transcribed by Spearritt (1979), show similar structures. The macrostructure of the piece *Mariuamangi* is based on an alternation of parts, for example the «moto perpetuo sections» (Spearritt 1979: 312) alternate with functional sections and equally smaller structural elements do interlock (Ammann 2011: 158). This model of alternation is omnipresent even in the microstructure where single tones or patterns of tones do interlock. At the same time, the interlocking on various levels creates a kind of hovering or swaying sound. The longer male flute plays a rhythmical drone by mostly playing the same tone, while the shorter flute sounds its tones (from harmonic II to harmonic VI) always between two drone notes. The hovering or swaying sound of the flutes is increased by regular strokes on a *kundu*, the beating of a spliced stamping bamboo and the calls through a voice modifying trumpet. The swaying of the flutes in combination to the other accompanying instruments creates a multilayered overall sound. This sound functions again as a call for the spirit named *Mariuamangi*, like the flute itself, and at certain moments during the performance, when the participants call “ah-h-h”, they feel that the *Mariuamangi* spirit has entered the flute and its music is perceived as this spirit’s voice.

Already in the 1930s Bateson realized that the structure of ceremonial flute music represents the highly dualistic structure of Iatmul society and their social relations (Bateson 1936), this fact has been confirmed in detail by Ammann (2011) and Moutu (2013). Bateson assumed that the young

men when learning to play the flute simultaneously absorb cultural knowledge: «Whether the process of thought patterned by such a system has influenced the planning of the flute duet it is impossible to say for certain, but this sort of staggering is not common as a feature of social organization, and I do not know of any similar phenomenon in music» (Bateson 1936: 8).

### *Sui and sagi of the Iatmul*

Wassmann (1982, 1988) analyzed song cycles of the Iatmul called *sagi* that contain the entire information of the primeval migration of the Iatmul groups and therefore they incorporate the most important historic and mythological information, only specialists of these myths know this history of creation. These songs cycles are performed during significant events such as the inauguration of a men's house (*ngego*) or family house (*ngai*), the completion of work on a particular canoe (*vala*), or at the death of an important group member (*kitagamat* or *minjango*).

Each song of the cycles refers to small leaps of the primeval events. These songs are very much formalized and for a performance the phrases are structured in a dualistic and reciprocal system similar to that of the flute music (Wassmann 1988: 37). On the macrostructure, the cycle can be divided accordingly into single phrases consisting of vast mythical information that demands a certain mnemonic technique. Thus, certain strings (*kirugu*) with knots symbolizing specific histo/mythical events function as the singers «external dimension of the human memory»<sup>18</sup> (Assmann 1999, translated by the author). In the case of the song cycle in the mind of the singers the time changes and they feel transferred to mythical times. This contrasts with the ceremonial flute performance where the musicians feel the arrival of the spirit in their world. This sensation of being transferred to the mythic time and being in contact with the ancestor spirits can be so strong that some singers start to cry during the performance (pers. com. Jürg Wassmann, September 2019)<sup>19</sup>.

### *Wagen mbangu of the Iatmul*

The Iatmul use two kinds of slit drums, the *mi*-drums of lesser mythical usage and the *wagen*-drums, the mythically more important drums.

---

<sup>18</sup> «Aussendimensionen des menschlichen Gedächtnisses» (Assmann 1999)

<sup>19</sup> The lyrics for a specific song cycle of the Nyaura were translated and analyzed by Wassmann, their melody, rhythm and the song structure has not been studied so far.

Both are stored in the men's house and out of sight of women. For certain ceremonies such as *rite de passage*, exchange ceremonies, house inauguration etc. the *wagen*-drums are struck for several days (Wassmann 1982: 48). These drumming performances of the Nyaura consist of three parts: a short introduction (*ngawi kigandi*), a long main part (*wagen mbangu*) and a short ending (*mbangu* and *mumbekabak*). «For the *ngawi kigandi*, the drumming alternates between short and fast tremolo-like patterns struck on two drums and short elements of standard patterns *bruwagen* on only one drum» (Spearritt 1979 vol II: 390). The main part of *wagen mbangu* consists of several repetitions of the rhythmical themes called *njangit* and each variation has its proper name in relation to a specific mythical protagonist. Each *njangit* again consists of a certain number of motifs performed in a certain order and separated from the following by a performance of the short standard *wagen mbangu* theme. The entire drum music is structured by alternation of *njangit* and *bruwagen* (Ammann 2018: 183). As in the song cycles and flute music, so does the drumming of the *wagen mbangu* mirror the structural element of reciprocity of the Iatmul society (including the Nyaura) and at the same time, it creates a kind of swaying based on the omnipresence of alternation. The mentioned Nyaura ceremonial music (songs, flute music and drumming) are not always accompanied by dancing or other movements, the swaying music includes cultural references and information that can be read by people with the necessary cultural knowledge.

The ceremonial instrumental music as well as the song cycles of the Nyaura and the Iatmul consists, from macrostructure to microstructure, of elements that are interlinked and that interact with each other. People imbedded in the Iatmul culture can read and understand these signals and their social reference. Iatmul society is strongly dualistic, metaphorically based on the image of crocodile jaws. *Nyoui* stands for heaven or father (upper part of the crocodile jaw) and includes the following entities: sun, day, stars, and trees. *Nyame* stands for earth and mother (lower part of the crocodile jaw) and the entities darkness, earth, night, and pig (Ammann 2011: 160). The Iatmul groups organize themselves in patrilineal clans and each clan belongs to one of the two moieties either *nyoui* or *nyame*. The interaction of clans, groups of clans and age groups or persons is always done in an alternation. For example, ego does not marry a wife of the same clan as his father but as his grandfather and ego's son does not receive the name of ego but of ego's father (Stanek 1983: 171). Alternating, interlock-

ing, and skipping structures can also be found in other Iatmul cultural contexts; for example, in the spatial arrangement of village houses: each moiety is located on one side of the main path and the houses of the clans are arranged in an interlocking style according to the even or odd number of the clan in the clan group (Wassmann 1988: 14).

The interlocking and alternating of musical elements, on one hand, makes reference to the structure of the society and, on the other hand, creates a repetitive rhythmic swaying that unites the participants and generates a feeling of companionship and identity, as well as generating strong emotions. For the Iatmul, a ceremony consists of moments when the participants either feel the presence of ancestors or feel themselves to be part of the mythical world.

Borut Telban, who carried out his ethnomusicological research with the Ambonwari at the East Sepik, says, in reference to ceremonies: «For the Ambonwari the images and sounds during a song-dance are those of spirits, the former calling the latter to join them. Both spirits and humans move together and merge. The dancers become spirits and the spirits become dancers» (Telban 2017: 247). He also refers to the combination of various senses that create this particular perception:

The feeling of mutuality of being in song-dances is created by bringing together visual, auditory, tactile and kinaesthetic sensory experiences, transmuting into each other. Even if the sung words were unintelligible, the singing, drumming and dancing, spread over twelve to fourteen hours and enhanced by betel nut chewing and smoking generates a powerful feeling of being one, of having on “insideness” and one skin.... (*ibid*:252).

## Conclusion

Several factors cause strong emotions in participants of Melanesian ceremonies: the place where the ceremony is held (in many cases, these places are historically and culturally important and respected), the rhythmic group movements (dancing), the music, and often the significant texts or song lyrics. Although the lyrics of the songs might be in a language that is not understood by all the participants, it still transmits indirect knowledge and functions as an identity marker. Each of these factors demands its separate analytical methods, but it seems that the interconnection of these factors is crucial for the sensation of strong emotions. The theories to frame this interdisciplinary approach are those of ritual communication

that transmits cultural knowledge in form of music and of cognition so that it leads to the mentioned spiritual experience.

The participants of Melanesian ceremonies need to dispose of the capacity to sense strong emotions, which according to our experiences and our arguments is culturally transmitted. The complex rhythmic network of music and dancing, which often includes some kind of rhythmic group movements, sets this sensation in motion. Music performances and dancing not only create strong emotions and a group identity; they also support the mental activities of participants in the ceremony. Music as well as dancing activates the cognitive processes, which might help to become aware of the cultural knowledge. Because of the strong oxytocin-discharge of the hypophyse, music-making and dancing causes a more stable memory and supports the memorization as a group experience (Altenmüller 2005: 140)<sup>20</sup>. When people move in coordination with the ritual sounds it provides a temporal orientation, which unites them in their movements and lets them feel a uniting force (Stupacher et al. 2017). The pulsation of these sounds moves the participants in an emotional avenue that leads them to the metaphysical experience of feeling the presence of the ancestors. In his work on the development of humankind and music, Mithen (2006: 205) refers to the important role of music for bonding and Merker (1999-2000: 66) confirms this fact but refers mainly to the importance of the rhythmic structure of music. The various temporal grids, macrotemporal phases, group movements, choreographical scenes, musical movements and rhythmic percussion create a complex multilayered interlinked construction of a soundscape that we call “swaying”: a repetitive undulating series of sound accentuations. Clayton et al. (2004: 2) propose to adopt the idea of “entrainment” for such multilayered sound perception: «...the entrainment model seems to reflect the cognitive processes much better than do previous models of metrical perception». The part of this theoretical and methodological idea that we might consider is its versatile application: «the concept of entrainment describes a shared tendency of a wide range of physical and biological systems: namely, the coordination of temporally structured events through interaction». And as shown in the above examples, this ceremonial music and dancing contains multilayered

---

<sup>20</sup> In a similar way, the signal of group identity is used in many other occasions, for example for national anthems or football terrace songs.

information of the society itself and the rhythmic structure in ceremonies consists of a multilayered system<sup>21</sup>.

If our arguments are correct, then Melanesians without the cultural knowledge and cognitive capability would not react to strong emotions in the same way as their relatives who live and think according to the “traditional” Melanesian culture. For this adverse example, persons – mostly young Melanesians: men and women and foreigners – who follow a more European or Australian lifestyle and participate only occasionally in ceremonies would be seen to develop less emotion when participating in ceremonies.

Strong emotions are the result of mental and physical effort which, in the case of Melanesian ceremonies, is expressed in feeling the presence of the deceased ancestors’ spirits or in being “beamed” into the world of the deceased ancestors. It is not only these single premises that lead the participants to this metaphysical experience but also the interconnection of all the information, communicated visually (choreography), aurally (sound and rhythm), and textually (language) that figures as the key for the understanding of this experience.

## Bibliography

- Altenmüller, E. 2005. Musik – die Sprache der Gefühle? Neurobiologische Grundlagen emotionaler Musikwahrnehmung, in *Wahrnehmung-Kognition-Ästhetik*, edited by Ralf Schnell, pp. 139-155. Bielefeld: Transcript.
- Ammann, R. 2018. Middle Sepik music and musical instruments in the context of Melanesia. *Journal de la Société des Océanistes*, «Le Sepik : société et production matérielle», 146:179-188.
- Ammann, R., Keck V. & J. Wassmann. 2013. The sound of a Person, A Music-Cognitive Study in the Finisterre Range in Papua New Guinea. *Oceania*, 83, 2: 63-87.
- Ammann, R. 2012. *Sounds of Secrets. Field Notes on Ritual Music and Musical Instruments on the Islands of Vanuatu*. Münster: Lit-Verlag.
- Ammann, R. 2011. Fractals in Melanesian Music, in *Austronesian Soundscape, Performing Arts in Oceania and Southeast Asia*, edited by Birgit Abels, pp. 155-168. Leiden: International Institute for Asian Studies.
- Ammann, R. 1997. *Dances et musiques kanak : une présentation des danses et des musiques mélanésiennes de Nouvelle-Calédonie, dans les cérémonies et dans la vie quo-*

---

<sup>21</sup> The theory and method of ‘entrainment’ might be considered, despite the fact that some ethnomusicologists take a critical stance towards this approach (Clayton & Sager & Will 2004:46).

- tidienne, du XVIIIe siècle à nos jours*. Nouméa: Agence de Développement de la Culture Kanak.
- Assmann, J. 1999. *Das kulturelle Gedächtnis. Schrift, Erinnerung und politische Identität in frühen Hochkulturen*. München: C. H. Beck.
- Baddeley, A., Eysenck, M. W. & M. Anderson. 2009. *Memory*. Hove: Psychology Press.
- Bateson, G. 1936. Music in New Guinea. *The Eagle*, 48: 158-170.
- Becker, J. 2004. *Deep Listeners, Music, Emotion, and Trancing*. Bloomington: Indiana University Press.
- Bonnemaison, J. 1994 (1986). *The Tree and the Canoe. History and ethnography of Tanna* (trans. Josée Pénot-Demetry). Honolulu: University of Hawai'i Press.
- Bonnemaison, J. 1987. *Tanna les Hommes Lieux. Les Fondements d'une Identité, Territoire, Histoire et Société dans l'Archipel de Vanuatu (Mélanésie)*. Collection Travaux et Documents n. 201, Livre II.
- Clayton, M., Sager R. & U. Will. 2004. In time with the music: The concept of entrainment and its significance for ethnomusicology. *ESEM CounterPoint*, 1: 1-45.
- Damon, F. 1982. Calendars and calendrical rites in the northern side of the Kula ring. *Oceania* 53: 221-239.
- Durkheim, E. 1912. *Les formes élémentaires de la vie religieuse. Le système totémique en Australie*. Paris: Les Presses universitaires de France.
- Eibl-Eibesfeldt, I. 1984. *Die Biologie des menschlichen Sozialverhaltens. Grundriß der Humanethologie*. München: Seehamer.
- Fischer, H. 1983. *Sound-Producing Instruments in Oceania* (trans. Philip Holzknacht). Boroko: Institute of Papua New Guinea Studies.
- Gabrielsson, A. 2011 (2008) *Strong Experiences with Music. Music is much more than just music* (trans. Rob Bradbury). Oxford: University Press.
- Goffman, E. 2013. Interaktionsrituale, in *Ritualtheorien, ein einführendes Handbuch* edited by A. Belliger, D. J. Krieger, pp. 319-334. Springer: Wiesbaden.
- Graf, W. 1950. *Die musikwissenschaftlichen Phonogramme Rudolf Pöchs von der Nordküste Neuguineas*, Österreichische Akademie der Wissenschaften, Wien: Rudolf Pöch Nachlass.
- Grimes, R. 2013. Typen ritueller Erfahrung, in *Ritualtheorien, ein einführendes Handbuch* edited by A. Belliger & D. Krieger, pp. 117-132. Springer: Wiesbaden.
- Huxley, J. 1966. A Discussion on Ritualization of Behaviour in Animals and Man organized by Sir Julian Huxley, F.R.S. Published by the Royal Society, Burlington House, Piccadilly, London, in: *Transactions of the Royal Society of London, Serie B, Biological Sciences*, vol. 772:247-526.
- Imberty, M. 1969. *L'acquisition des structures tonales chez l'enfant*. Paris: Klincksieck
- (de) La Hautière, U. 1980 (1869). *Souvenirs de la Nouvelle-Calédonie*. Nouméa : Hachette-Calédonie.
- Leenhardt, M. 1930. *Notes d'ethnographie néo-calédonienne*. Travaux & Mémoires VIII. Paris: Institut d'Ethnologie.



- Leenhardt, M. 1937 (1986). *Gens de la Grande Terre*. Paris: Gallimard.
- Lemire, C. 1884. *Voyage à pied en Nouvelle-Calédonie et description des Nouvelles-Hébrides*. Paris: Challamel.
- Malinowski, B. 1922. *Argonauts of the Western Pacific. An Account of Native Enterprise and Adventure in the Archipelago of Melanesian New Guinea*. London: G. Routledge & Sons; New York: E.P. Dutton & Co.
- Malinowski, B. 1935. *Coral Gardens and their Magic*. 2 Vols. London: Allen & Unwin.
- Malinowski, B. 1974. *Magic, Science and Religion and Other Essays*. London: Souvenir Press.
- Mauss, M. 1923. Essai sur le Don, Forme et Raison de l'Echange dans les Sociétés Archaïques. *L'année sociologique*. Nouvelle Série, 1: 143-279.
- McLean, M. 1994. *Diffusion of Musical Instruments and their Relation to Language Migrations in New Guinea*. Kulele: Occasional Papers on Pacific Music and Dance, n.1. Port Moresby: Cultural Studies Division, National Research Institute.
- Merker, B. 1999-2000. Synchronous chorusing and the origins of music. *Musicae Scientiae*, 1: 59-73.
- Mithen, S. 2006. *The Singing Neanderthals, The Origins of Music, Language, Mind and Body*. Cambridge: Harvard University Press.
- Moutu, A. 2013. *Names are thicker than blood. Kinship and ownership amongst the Iatmul*. Oxford: university press.
- Niles, D. 1992. Konggap, Kap and Tambaran: Music of the Yupno/Nankina Area in Relation to Neighbouring Groups, in *Abschied von der Vergangenheit. Ethnologische Berichte aus dem Finisterre-Gebirge in Papua New Guinea*, edited by J. Wassmann, pp. 149-183. Berlin: Reimer.
- Rappaport, R. 1999. *Ritual and Religion in the making of Humanity*. Cambridge: University Press.
- Roesicke, A. 1914. Mitteilungen über ethnographische Ergebnisse der Kaiserin-Augusta-Fluss-Expedition. *Zeitschrift für Ethnologie*, 46: 507-522.
- Sarasin, F. 1929. *Ethnologie der Neu-Caledonier und Loyalty-Insulaner*. Berlin: C.W. Kreidel.
- Schneider, M. 1969. *Die Geschichte der Mehrstimmigkeit, historische und phänomenologische Studien*. vol. 1 (sec. ed.). Tutzing: Schneider.
- Senft, G. 2014. *Understanding Pragmatics*. London/New York: Routledge.
- Senft, G. 2009. Trobriand Islanders' forms of ritual communication, in *Ritual Communication*, edited by G. Senft & E. Basso, pp. 81-101. Oxford: Berg.
- Senft, G. 2011. *The Tuma Underworld of Love: Erotic and other narrative songs of the Trobriand Islanders and their spirits of the dead*. Amsterdam: John Benjamins.
- Spearritt, G. 1979. *The Music of the Iatmul People of the Middle Sepik River (Papua New Guinea) with Special Reference to Instrumental Music at Kandingai and Aibom* (Vol. I and II) Ph. D. dissertation, University of Queensland. St.Lucia.
- Speiser, F. 1923. *Ethnographische Materialien aus den neuen Hebriden und den Banks-Inseln*. Berlin: Kreidel Verlag.

- Stanek, M. 1983. *Sozialordnung und Mythik in Palimbei, Bausteine zur ganzheitlichen Beschreibung einer Dorfgemeinschaft der Iatmul East Sepik Province, Papua New Guinea*. Basel: Wepf.
- Stupacher, J., Maes P.-J., Witte M. & G. Wood. 2017. Music strengthens prosocial effects of interpersonal synchronization – If you move in time with the beat. *Journal of Experimental Social Psychology*, 72: 39-44.
- Telban, B. 2017. The Intoxicating Intimacy of Drum Strokes, Sung Verses and Dancing Steps in the All-Night Ceremonies of Ambonwari (Papua New Guinea), in *Collaborative Intimacies in Music and Dance: Anthropologies in/of Sound and Movements*, edited by E. Chrysagis, P. Karampampas, pp. 234-257. Oxford : Berghahn.
- Wassmann, J. 2016. *The Gently Bowing Person. An Ideal among the Yupno in Papua New Guinea*. Heidelberg: Universitätsverlag Winter (Heidelberg Studies in Pacific Anthropology vol. 4).
- Wassmann, J., Kluge C. & D. Albrecht. 2011. The Cognitive Context of Cognitive Anthropology, in *A Companion to Cognitive Anthropology*, edited by D. Kronenfeld, G. Bennardo, V. de Munck & M. Fischer, pp. 47–60. Oxford: Blackwell.
- Wassmann, J. 1991. *The Song to the Flying Fox*. Boroko, Papua New Guinea: The National Research Institute (Apwitihire 2).
- Wassmann, J. 1988. *Der Gesang an das Krokodil. Die rituellen Gesänge des Dorfes Kandingei an Land und Meer, Pflanzen und Tiere (Mittelsepik, Papua New Guinea)*. Basel: Wepf.
- Wassmann, J. 1982. *Der Gesang an den Fliegenden Hund. Untersuchungen zu den totemistischen Gesängen und geheimen Namen des Dorfes Kandingei am Mittelsepik (Papua New Guinea) anhand der kirugu-Knotenschnüre*. Basel: Wepf.
- Whitehouse, H. 1996. Jungles and Computers Neuronal Group Selection and the Epidemiology of Representations. *Journal of the Royal Anthropological Institute* (N.S.), 1: 99-116.
- Yamada, Y. 1997. *Songs of Spirits: An Ethnography of Sounds in a Papua New Guinea Society* (trans. Jun'ichi Ohno). Apwitihire 5, Boroko: Institute of Papua New Guinea Studies.

## Discography

- MacLennan, Robert, Gordon Spearritt, Meinhard Schuster (1981). *Music of Oceania: The Iatmul of Papua Niugini*. Bärenreiter Musicaphon.