Dampal Utara. This Kecamatan is a peninsula full of small hills (hardly reaching 300 meters in height) and rather small plains in-between. The hill chains of Dampal Utara run south-north in rows of three up to five, parallel to each other. At Ogotua the coastal line turns east with a small hill separating Ogotua from Bambapula. A smaller (Lingayan) and a larger island (Simatang), both very close to the shore (Simatang about 3 km), form the northernmost extensions of the peninsula. After Bambapula the coastal line is predominantly occupied by tiny hills until Tompoh, turning north-south at Malambigu. A hilly part of about 10 km separates Tompoh from Banagan where the coastline turns east again.

Banagan and Salumbia are located in the first deep west-eastern plain (ca. 6 km) which, however, rises slightly after only about 2 km. Another hilly part of about 6 km extension separates this plain from the large and fairly deep plain in the centre of the Kecamatan Dondo. This plain, in turn, is divided into two sections by a small elevation between Malomba and Ogogili (making one completely flat area stretching from Bambapun to Malomba, and the other, somewhat narrower from Ogogili to Malala).

At Malala Bay the coastal line turns north (closing the Dondo Bay) and the following 45 km are filled with low, but steep hills reaching far inland to the foot of the higher mountains. The only flat part is the Muara Besar river delta containing lots of narrow valleys. The coastal line then turns slightly east, opening up to the Tolitoli plain.

About 6 km east of Malala, at Sibalutan, there is a single, relatively low chain of hills that separates the coastal area from a rather complex area of interconnected upland plains and valleys that stretches (inland) from Malala in the west to about Nalu (Tolitoli) in the east. This upland plain area is separated from the eastern Dondo hill lands and the Tolitoli plain by a steep west-eastern mountain chain. All inland rivers are channeled through a small 'hole' in this chain, close to the border of Kecamatan Dondo and Kecamatan Baolan, and brought down to the hilly area of eastern Dondo by the river Muara Besar.

The easternmost extension of this area is a large, completely flat upland plain just about 17 km south of Tolitoli (Tinading-Plain, Kecamatan Baolan). It is separated from the Tolitoli plain by the mountain chain just mentioned and a smaller hill chain that runs parallel to it. Unlike the mountain chain, the hill chain is interrupted south of Nalu allowing for an easy access to the valley between mountain and hill chain. In this valley, Dadakitan is located. Thus, since the Tinading plain is directly connected with the large river delta of eastern Dondo, it should be no surprise to find Dondo people in this area (rather than Totoli).

In the area of Tolitoli Kota (Panasakan) the coastal line turns sharply north and a mountain projects nearly to the beach, thus separating the Tolitoli plain from the next large plain comprising the area from Sandana up to Dungingis. This plain is fairly deep, and between Lalos and Sabang (Kecamatan Galang), is separated from the coast by a small hill chain. From Bajugan onwards the plain narrows, with hilly sections and small plains interchanging after Dungingis.

At Tanjung Binar (Kapas) the coastal line makes its final eastward turn, followed by an area of small plains separated by rather steep mountains. Santigi and Laulalang are situated at the mouth of an extensive bay area. At Laulalang there is a small stretch of narrow flat coast line of about 5 km, followed by a somewhat deeper plain (Salumpaga). The next three even stretches (Diule, Pinjan and Binontoan), however, are again separated by steep mountains.

Entering the area of Buol (at the border between Lakuan/Tolitoli and Lakuan/Buol) means simply crossing a river. From here on the coastal line is relatively flat.

Along the East Coast, we find pretty much the same kind of topography as on the West Coast. However, the coastal line here is almost completely flat all the way from Parigi to Moutong, with the exception of a steep mountain separating Ongka from Bolano (Kecamatan Moutong) and a few minor elevations between Donggulu and Laemanta (Kecamatan Ampibabo) and in Kecamatan Tinombo. Here, the coastal line is also for the most part quite narrow, leaving hardly enough space for the road which closely follows it. The main mountain ridge reaches the coast between Pangga and Marantale (border of Kecamatan Parigi and Ampibabo) and Palasa and Tingkulang (Kecamatan Tomini). Otherwise, small hill chains quite frequently extend right to the border of the sea. The coastal plains are generally quite small, leaving room for just one or two villages. Plains reaching some depth and expansion are found between Parigi and Pangi in Kecamatan Parigi (already fairly densely populated), between Silangaa and Buranga and between Kasimbar and Siney in Kecamatan Ampibabo, between Tomini and Ongka in Kecamatan Tomini, and between Bolano and Gio and the area around Moutong in Kecamatan Moutong. The depth of two of these plains (Tomini-Ongka and Bolano-Gio) is quite substantial (up to about 20 km). Southern Tinombo (from Tada to Sidoan) is a swampy area, with lots of small hills, which seems to have been settled only recently.

In northern Tinombo and Western Tomini (from Dongkas up to Palasa, i.e. the core area of the Lauje people) there are hardly any coastal plains, the only place with extended coconut plantations and some wet-rice planting on the coastal plain being Palasa in Kecamatan Tomini. This area is located at the turning point of the peninsula, and one could then speak of somewhat extended river-valleys rather than plains. The rivers almost exclusively follow a west-eastern line and the often extremely curvy river valleys are easily accessible.

Further south, between Siney and Dongkas, one also encounters extensive pieces of 'land' full of brackish water, comparatively rare on the West Coast.

2.4.2 Socio-economic stratification

Tania Li, in her study on the Tinombo Region (predominantly populated by Lauje), proposes a division of the area into three distinct agro-ecological zones based on both bio-physical as well as social components (1991:4f). Her transect through these zones is reproduced in Figure 1 (for a more detailed description, see the appendix in Li (1991:79ff)). With regard to (socio-)linguistically relevant distinctions, this division may basically be applied to the Tomini-Tolitoli area as a whole with the following modifications:

The Tinombo area is exceptional in having three distinct agro-ecological zones. In the rest of the area the far-inland locations are uninhabited, thus making a distinction between middle and inner hills based on geographical/ecological parameters difficult to draw. However, the social, agricultural, and religious parameters characterising each of the respective populations of these zones may be applied to other regions as well, with the understanding that they are, as Li (1991:7f) also points out, relative terms that allow for a considerable amount of transitional varieties. In this book, then, the term *middle hill people* is used to refer to those people who live some distance from the coast, often in fact in the foothills or on an inland plain; in village or hamlet-like settlements; who cultivate dry rice, corn and some cash crops; who are at least nominally Islamic; who share the basic values of the coastal population; and who are to a large extent integrated in the governmental control- and benefit-system. *Inner hill people*, on the other hand, live close to the forest frontier (which is often not very far from coastal settlements) in small groups of 2-3 households, plant taro and cassava as their main staple

food, eat pigs, do not adapt their values, lifestyle and dressing to coastal standards, and are affiliated with either an indigenous religion or Christianity.[40]

The Lauje middle hill people are also exceptional in that their culture and lifestyle have evolved over centuries. Middle hill people in other parts of the area are more often than not first or second generation resettled inner hill people, whose settlements were initiated and often funded by either the Indonesian government or by missionaries. A general characteristic of these resettlement projects is their attractiveness to poor members of the coastal population, and even to migrants from South Sulawesi and North Sulawesi, making any other middle hill settlement not nearly as linguistically and culturally homogeneous as the Lauje middle hill region.[41]

While inner and middle hill people, to date,[42] seem to form socially and economically fairly homogeneous groups, the coastal population is divided into economic/occupational classes. The majority of the population call themselves farmers, though many of them own only few, if any coconut trees (according to the traditional landrights of the area, the owner of a coconut tree generally owns the land on which the tree stands) or sawah (wet-rice fields). Instead, they gain their livelihood through wagework (for the owners of large coconut plantations, sawah or cash crop gardens), petty trade, and some small scale gardening and/or fishing. They normally generate enough income on a day-by-day basis to sustain their families and to provide for basic education for their children. Also part of this class, but forming a homogeneously distinct group, are the professional fishermen who often do not own their own equipment (and thus have to share the catch with the equipment owner) and who more often than not live in their own hamlet on the shore, the village 'centre' usually being located up to 1 km off the shore.

Another class is formed by the political, educational and also frequently economic elite who controls the local government and educational institutions, a substantial part of the fertile coastal land, and these days also owns considerable cash crop gardens. These people belong to the families of mixed Tomini-Tolitoli and Kaili/Mandar ancestry who have controlled the area for at least the last two to three hundred years (cf. §2.4.3).

[40] Christian inner hill people share many more characteristics with middle hill and coastal people than those inner hill people who adhere to indigenous religious practices. Thus, in a more fine-grained scheme the former would certainly constitute a group of their own. Sociolinguistically, they are set apart from other inner-hill people by their greater proficiency in Indonesian since all missions provide at least some rudimentary education in Indonesian and use Indonesian (often together with the indigenous language) in their religious instruction and ceremonies.

[41] Government projects have often been established together with, and on the fringes of, transmigration areas, which tend to be economically and culturally predominant in their respective areas. Linguistically, Indonesian is the predominant public language in transmigration project neighbourhoods.

[42] As Li repeatedly points out, this state of affairs is presently undergoing rapid change through the increased cultivation of cash crops in the hill regions. Since access to fertile land is not evenly distributed, one may see in the near future class distinctions in these areas similar to those on the coast.

ZONE	COASTAL				MIDDLE HILLS	RIVER VALLEY	INNER HILLS	
RAINFALL	seasonal				frequent		very frequent	
VEGETATION	Mangrove	Grass, Bushes	Light Secondary Forest	Grass	Light Secondary Forest, Grass	Primary Forest	Deep Secondary Forest	Primary Forest
CROPS/ USAGE	Fish Ponds	Coconut, Wage Work	Corn, Grazing, Tobacco	Grazing	Corn, Rice, Shallots, Goundnuts, Cocoa, Cashews, Kapok, Candlenut		Taro, Cassava, Corn, Rice, Garlic, Cocoa, Cloves	
RESOURCES EXTRACTED FOR SALE	Fuel Wood		Fuel Wood		Bamboo	Rattan, Timber		Rattan, Cinnamon, Resin Timber
WILD FOODS	Fish, Shrimp		Ondot		Ondot	Fish	Wild Pig	Sago, Onaun
PEOPLE	Lauje and others		Coastal Lauje		Middle Hill Lauje		Inner Hill Lauje	
RELIGION	Islam						Christianity and Indigenous Religion	

Figure 1: Transect through agro-ecological zones in the Lauje area
(= figure 1 in Li (1991:5), reproduced here with slight changes)

Finally, there is the small, but economically the most powerful, class of traders who buy the local produce (copra, chocolate, garlic, etc), finance rattan expeditions and fishing equipment, run taxi services to Palu and own stores well-stocked with household items, dry goods, hardware, etc. Most, if not all, traders are Chinese or Bugis. The Chinese are never fully integrated into the socio-political life of the village; Bugis traders are fully integrated only in those villages with a considerable Bugis population. The traders have probably been present in the area for hundreds of years, though until fairly recently only in those villages with major ports (nowadays the subdistrict capitals). Today, no villages exist without at least one such trader.

This, of course, is a fairly schematic and oversimplified view of the social stratification of the coastal population. For instance, not every village head is well to do, and many members of the old aristocracy are impoverished (see Nourse (1989:54 passim) for a more comprehensive appraisal of the old Lauje aristocracy in Dusunan). The promotion of new cash crops in the last 20 years (especially cloves and chocolate) has lead to considerable differentiation within the farmer class, i.e. between those who are able to borrow the money necessary to establish a successful cash-crop garden and those who are not. At the same time, numerous new government positions, particularly in the educational and agricultural sectors, have been created which provide access to a small, but regular cash income (plus health benefits and a monthly rice allowance) for the poorer, more distant relatives of the leading political families. The latter two developments have led to the establishment of a middle class

that has enough funds to provide for higher education for their children and/or to hire labour for their cash crop gardens. Such a middle class can already be found in the subdistrict capitals and in the sites of government-sponsored plantation and transmigration projects.

Furthermore, note that within the class of coastal farmers, as well as among the middle and inner hill people, there is a social hierarchisation based on charisma, 'natural leadership', and ritual and healing knowledge. These 'outstanding' persons are called Kepala Suku, Kepala Adat, Sando/Dukun, or simply Tokoh Masyrakat ('prominent figure of the society'). The local government is partly based on close cooperation with these 'prominent figures'.

Speakers of Tomini-Tolitoli languages are distributed among these cultural groups and economic-occupational classes as follows: speakers of Balaesang, Dampelas, Dampal, Totoli, Tialo, and Boano are exclusively coastal dwellers. The majority of Dondo, Tajio, and Ampibabo-Lauje speakers are coastal dwellers as well, while the other speakers of these languages are middle hill people (a few Dondo living in the area of Oyom may be inner hill people). Pendau are generally either middle or inner hill people, though some of the Christian Pendau settlements on the southern end of the West Coast already display many characteristics of coastal dwellers. Taje and Lauje are represented in all three cultural zones. Generally speaking, seventy to eighty per cent of the Tomini-Tolitoli are nowadays coastal people, the middle and inner hill segments each constituting perhaps ten per cent of the overall population.

As for economic-occupational classes, it is obvious from the above that Tomini-Tolitoli speakers are not part of the trader class. Among the fishermen, they are but a small minority, often intermarried within the fishing specialist group (Bajau, Gorontalo, Bugis). That is, nearly all coastal Tomini-Tolitoli speakers are farmers, the more privileged ones also being members of the political and educational elite.

In evaluating the reliability and representativeness of the survey materials collected here, it is important to note that most contributors to this survey belong to the political-educational elite of the coastal population. Major exceptions include the Pendau and the Taje contributors, most of whom can be considered middle hill people. The coastal Taje in Petapa are so dominated by the Tara and Rai, that they have not managed to become members of the political-educational elite and generally belong to the poorer segments of the farmer class. Concerning the other languages, non-elite Tokoh Masyrakat occasionally participated in the elicitation sessions and contributed most of the recorded stories. No inner hill people were contacted for this survey.

2.4.3 History

As for the history of the area, there are very few records directly concerned with the Tomini-Tolitoli area up to the most recent times (ca. 1970). This lack of historical records is just one of a number of indications for the fact that the area has been, and continues to be, a peripheral one. It has never been a power centre dominating adjoining areas but, instead, has always been at the very fringes of the various powers which have sought to control parts or all of Sulawesi.[43] From the few records, most of which are connected to the important kingdom

[43] See Henley (1989) for a short, but comprehensive outline of the history of Sulawesi.

and trade centres: Donggala, Palu, Parigi (all in the Kaili area) and Gorontalo, and local traditions, the following picture emerges.[44]

The Tomini-Tolitoli people seem to have been the original settlers in the area.[45] Probably in the 15th, but certainly in the early 16th century, the area became part of the Ternatean empire. It served primarily as a reservoir of slaves. Vassals of Ternate were installed at a few strategic points (Tolitoli and Tomini are mentioned in some of the records) in order to secure the continuous supply of slaves and perhaps also some food items – as is well-known, Ternate and the other Spice Islands depended on food supplies from other islands because their own territory was covered with cloves and nutmeg.

It is not known in which agro-ecological zone the Tomini-Tolitoli lived before they came into contact with Ternate. It is almost certain, however, that if they did not already live in the middle and inner hill zones many of them moved into these zones at the time of the Ternatean contact in order to evade slavery and the fairly regular raids of pirates from the Celebes Sea. Raids by slave-traders continued until the Dutch established a firmer control of the area around 1900. Pirate raids occurred as late as the 1960s (primarily on the West Coast).[46] The long and pervasive history of raids by slave-traders and pirates is still manifest in the firm conviction shared by all middle and inner hill people to the present day that the coast line is a dangerous place to live and that they much prefer to stay in the forest, which provides the best protection from attacks of outsiders.

After the decline of the spice empires at the end of the 17th century, powerful Bugis and Mandar kingdoms in South Sulawesi took over the control of the Tomini-Tolitoli coastlines, in cooperation with their Kaili allies who had been subjugated by them earlier on. Their primary goal was to use some of the largely empty coastal planes of the Tomini-Tolitoli area for agricultural purposes, in particular coconut plantations. To this end, marriages were arranged between male members of the Bugis, Mandar, or Kaili nobility and female members of the Tomini-Tolitoli nobility. The task of the Tomini-Tolitoli nobility was to persuade (or force) their people to move with them from the mountains to the coastal plains and work on the plantations. In several areas this lead to a split among the members of a Tomini-Tolitoli tribe, with part of the population remaining in the mountains (the ancestors of the present day inner and middle hill people) and the other part following their nobility down to the coast (the ancestors of the present day coastal population).[47]

From a sociolinguistic point of view, it is important to note that only a few outsiders (Bugis, Mandar or Kaili) were directly involved in this enterprise. These people settled in the area and learned the language. The pact between the two nobilities was continually renewed through intermarriages according to the same pattern (male Bugis/Mandar/Kaili and female

[44] For more details, see Adriani and Kruyt (1912:117-166, 297-360), Davis (1976:94-105), Masyhuda (1977:9-52), Nourse (1989:1-101), Andaya (1993), Swadling (1996:21-47). The following sketch focuses on the parts of the Tomini-Tolitoli region that were politically dominated by Kaili people. The northern part of the region on the East Coast, i.e. roughly the area between Moutong and Tinombo (inhabited by Tialo and Lauje), used to be in the Gorontalo sphere of influence. The developments in this area differ in some respects from those in the Kaili dominated parts of the region. For details, see chapter 2 in Yoshimura (in prep.).

[45] That is, at present nothing is known about earlier settlers. Note, however, that to date no archaeological studies have been carried out in this part of Sulawesi.

[46] The contributors in Binontoan, for example, claimed that the village was attacked and ransacked by Philippine pirates in 1947, 1953, and 1961.

[47] Cf. Nourse (1989:4-11, 69-101) for the Lauje version of these events.

Tomini-Tolitoli). This seems to have happened fairly consistently until about the 1950s as shown by the fact that most members of the present day political elite of the Tomini-Tolitoli coastal population (i.e. the descendants of the former nobility) claim to have at least one continuous chain of Bugis, Mandar or Kaili males in their ancestry.[48] Nevertheless, in the older generation it is the rule rather than the exception that the members of this elite are fluent and competent speakers of a Tomini-Tolitoli language which is generally their first (their mother's) language (they also know Kaili and/or Bugis and Indonesian).

This interactional pattern between South Sulawesi and Tomini-Tolitoli people changed radically around 1900 when the Dutch involved their South Sulawesi allies in the military campaigns aimed at fully controlling, and increasing, the production of cash crops in Central Sulawesi.[49] The Dutch 'era' in Central Sulawesi (ca. 1900-1940) brought two major changes to the Tomini-Tolitoli area despite the fact the major Dutch economical and religious enterprises concentrated on Palu, Parigi and the central highlands (Lake Poso and surrounds). On the one hand, a few schools (located in those villages that today have become subdistrict capitals) were established, which were attended by a small number of children of both common and noble coastal dwellers. The education usually ended with the third grade, which was enough to teach some basic writing and arithmetic.

On the other hand, substantial numbers of poor (common) South Sulawesi people began to migrate to the still largely empty but fertile[50] land of the Tomini-Tolitoli area. These migrants generally settled in, or close to, the established coastal villages and opened up new locations for their own plantations. They usually arrived with little more than the capital and tools necessary to stake out claims, to clear the forest and buy a first set of seedlings. They achieved an economic position similar to the native Tomini-Tolitoli within a generation or so, often even being economically more successful than the average Tomini-Tolitoli family in a given village. Moreover, they started almost immediately to interact socially with the Tomini-Tolitoli. The major focus of this migration was the West Coast. It happened in various spontaneous waves and actually continues to the present day, albeit on a much smaller scale.

The Second World War and the following years of the Indonesian revolution and various secessionist movements (until about 1965), which the contributors often summarily referred to as *Waktu Gorombolan*, brought two and a half decades of continuous unrest to the area.[51] These times were particularly hard for the coastal population which was attacked and maltreated by various warfaring parties (the Japanese, the Dutch, and the Indonesian military, and various guerrilla groups). Several villages were completely deserted for some years, the inhabitants (re-)joining their former 'relatives' in the middle and inner hills. In the wake of the Darul Islam movement, which was strongest in South Sulawesi in the 1950s but also spread to Central Sulawesi and the Tomini-Tolitoli area, another strong wave of immigration by South Sulawesi people occurred, some of whom affiliated with the movement, others attempting to flee from the recurring massacres.

[48] It is thus not surprising that many of them have typically South Sulawesi names such as *Amerang Hj. Dg. Palipa, Abrahman Dg. Mallawa,* etc.

[49] Several Tomini-Tolitoli groups appear to have been involved in a war against the Dutch in 1905.

[50] Compared to the very fertile volcanic soil found in Java, Bali, or Minahasa, the alluvial soil found in Central Sulawesi is rather poor. Thus, *fertile* here and in the following discussion means something like 'land amenable to agriculture'.

[51] For a detailed account of the events in South Sulawesi after the Indonesian independence, see Harvey (1977).

Since about 1970 the region has been undergoing a rapid change (modernisation) engineered by the Indonesian government. In some areas (in particular in the town of Tolitoli and its vicinity) this change occurred extremely fast because of the economically very successful introduction of new cash crops such as cloves (for which there was a boom in the 1970s but whose value has since dropped considerably). The first and major innovation was the establishment of an extensive network of primary schools (all villages and most settlement projects today have at least one primary school), followed by health centres, sealed roads, electricity, and television. That is, at least the coastal zones have become fully integrated parts of modern Indonesia. The power centre, of course, continues to be in Palu and the provincial government is dominated by Kaili (and people from South Sulawesi) but some Tomini-Tolitoli participate in the local government on the district and subdistrict levels.

As for the middle and inner hill regions, considerable efforts have been made by the Indonesian government, missionaries and foreign aid development projects to integrate their population in the modernisation process. Resettlement projects, which have the task of bringing the inner hill people closer to the coastal village centres, have been established for nearly all inner hill people, the major exception being the inner hill Lauje in the Tinombo and Tomini subdistricts.

2.4.4 Settlement patterns

As mentioned already in preceding sections, the majority of the Tomini-Tolitoli people nowadays live close to the coast on the larger plains, which in all likelihood is not their traditional habitat. Note that apart from the fact that the coast used to be considered dangerous because of the regular raids by slave-traders and pirates, the sandy and regularly flooded soil of the coastal plains is unsuitable for planting root crops, the traditional staple food of the area.

Though most of the coastal villages contain some sort of a centre, they generally do not form tightly knit geographic and social units. The Indonesian term *Desa* refers to administrative, fairly schematically defined units. These cover a broad area, often consisting of a number of smaller hamlets. Sometimes, the houses of a village stretch 4-8 km along the road (where the inhabitants at one end usually hardly know those living at the other end). Quite often, the different parts of a village are separated from each other by 2-4 km long stretches of gardens or wet-rice plantations. In the larger villages, the garden locations are so far removed from the village centre that many inhabitants have built huts or even small houses in the garden and stay there for extended periods. In several villages people have even been asked to build a house in the village centre rather than just to entertain a house in the garden. Sometimes, new villages emerge through this practice of making the garden the preferred place of living. In this way, Lemo, north of Ampibabo, was formerly just the garden location of the villagers of Ampibabo.

A more village- or even town-like character is found in those coastal villages that have a major port and were designated in Dutch times as collecting posts for copra. These villages have been populated for a long time already by immigrants from North and South Sulawesi and the Kaili area. Nowadays, most of them are subdistrict capitals, including Ampibabo, Tinombo and Moutong on the East Coast, and Sabang/Sioyong, Soni/Bangkir, Ogotua, Tinabogan, Lalos and Laulalang on the West Coast. Tolitoli and Parigi have been major ports for even a longer period and are considered small towns with 30-40,000 inhabitants. See

Nourse (1989:50ff) for a vivid account of the differences between 'mundane' Tinombo and the surrounding Lauje villages.

Middle and inner hill people do not have villages of their own (in the administrative sense). Instead, they are treated as part of the closest coastal village. Middle hill people live in hamlets with 10 to 50 households. Inner hill people live either alone or in groups of 2-3 households. Due to this settlement pattern, inner hill people are often believed not to form larger, closely knit social groups. This, however, is contradicted by the fact that in moving from one garden location to another inner hill people form networks of 30 or more households rather than just moving alone or in groups of 2-3 households. The belief widely held by the coastal population and the local government that inner hill people are a kind of nomad people who are always on the move also appears to be untrue. It is true that they move regularly between garden plots; this, however, occurs once every 3-5 years (and not every other week). Furthermore, they move around in a clearly delimited area, regularly returning to old plots after they have allowed them to fallow for ten or fifteen years. See Li (1991:37ff) for a more detailed account of the inner hill people's system of livelihood.

2.4.5 Vegetation/Economy

Vegetation and Economy can be discussed under one heading since the economy of the area is exclusively based on agriculture and forestry.

Until the late 19th century, most of the area was tropical wilderness. Sago and aren trees as well as various fruit-bearing trees had been flourishing without requiring any labour. The native, shifting agriculture seems to have been mainly geared to planting cassava, taro, sweet potatoes, and some vegetables. It remains unclear exactly when dry rice and corn were introduced to the area, but since the terms used to designate these items are clearly borrowed terms, one may suspect that this occurred not too long ago.

It was only at the turn of the 20th century that extensive planned coconut planting and wet-rice cultivation was introduced and enforced by the Dutch in cooperation with their Bugis and Kaili associates/allies (see also §2.4.3). Today, the sandy parts of the coast are covered almost everywhere with coconut trees at least 60 years old. In emphasising the central role played by copra in Sulawesi's economy Harvey (1977:23) quotes estimates according to which "copra provided the major source of income for 70 per cent of the population of Sulawesi ... in the early 1950s".

In the late 1960s, and early 1970s, cloves – another cash-crop – was introduced, which in the Tolitoli area has turned all the hills from Bilo up to Laulalang into one large clove-garden, at times even reaching beyond the coastal chain into the second and third hill chains.[52] It was also only in the seventies that clearing of the extensive inland plains was begun (e.g. around Parisan or Kota Raya), which today are completely covered by sawah and gardens. In the 1990s, the most strongly-favored cash-crop was chocolate. As a consequence, all those hill chains not suitable for planting cloves were turned into chocolate-plantations, a development strongly supported by the government.

Though Tinombo was already known for its tobacco in the eighteenth century (Nourse 1989:372), tobacco is hardly cultivated in the rest of the area. Coffee, first introduced by the

[52] In Bou in 1988, the income generated through cloves was so high that the owners of the clove trees didn't consider it profitable to have their wet rice fields worked on as well. Note that at the time the clove price had already dropped considerably, and it continued to drop throughout the 1990s.

Dutch in this century, has no real economic importance and is often planted just for private use. The same holds true for vegetables and fruit, when planted at all. In many places it is often impossible to get hold of vegetables since all residents are exclusively occupied with cash-crop planting. Only around the transmigration projects are vegetables always available.

As a result of the extensive cash-crop planting and the intensification of rice-cultivation in the last thirty years, almost all the land close to the coast, whether flat or hilly, has been turned into cultivated land, either coconut or wet rice plantations, or gardens. And with the development of the transmigration projects, the inland region is becoming more and more affected. One of the last really extensive jungle areas close to the coast, i.e. the mountain between Ongka and Bolano and the ensuing large swampy area, was being cleared for gardening in 1988.

In the inland jungle areas, rare and expensive woods (such as ebony), resin and rattan can be found. The latter are collected by the native population on a small scale, providing an extra income for many families. The cutting of wood has been primarily undertaken by foreign investors, earlier in this century by Dutch and Germans, nowadays by Japanese, Koreans and Malaysians.

The often extensive brackish water sections along the coastal line (for example in Sioyong (Dampelas Sojol), in Binontoan (Tolitoli Utara), and in various locations in Kecamatan Moutong, Tomini and Tinombo) were not made use of until the late 1980s, with the exception of cutting the mangroves for fire wood. Since then, most of these sections have been turned into fish or shrimp ponds. Establishing such ponds, however, requires some capital and is generally undertaken by Bugis entrepreneurs. Nearly all of the mangroves have already disappeared (cf. also Li 1991:19).

Regarding animals, cows, goats, chickens, and ducks are fostered. The woods still abound with deer and wild pigs. Pigs are at times a real plague, particularly in the surroundings of Moslem settlements. Only very strong (and expensive) fencing can keep them out of the gardens.

2.4.6 Modern infrastructure (Transportation/Communication/Electrification)

With regard to modern infrastructures, the area continues to undergo rapid change, which started in the mid 1970s.

There are roads on both stretches of coast, which nowadays are the main travel routes. Formerly, the coasts could only have been traveled by boat or on foot.[53] Before 1970 the ship from Palu to Tolitoli (and further east to Manado) passed by every three months. The road from Palu to Talaga and Sabang (West Coast) was opened in 1980. In 1988, there was only a dirt road between Rerang and Ogoamas, which more often than not was hardly negotiable. In 1991/92 a complete restructuring and completion of the road system on the West Coast was undertaken so that in 1993, one could go by car all the way from Palu to Buol. At the same time, the road on the East Coast – which is part of the Trans-sulawesi Highway from Ujung Pandang to Manado and was already negotiable since the late 1970s – was completely renovated, so that travel time from Palu to Tinombo was down to 6-7 hours from 12-16 hours

[53] But note that the road from Tolitoli to Kapas was already constructed at Dutch times and has been maintained reasonably well till the present.

in 1989.[54] Vehicle-negotiable connections between the West and the East Coast are somewhat scarce and not well maintained. There is a road between Tambu and Kasimbar, and one connecting Malala and Tomini via Sibaluton and Mensung.

Foot trails between the two coasts are very common all along the area. Crossovers take between 6 hours and two days (for middle and inner hill people), depending on the number of intervening hill chains and the height of the central mountain range. There is also a foot trail from Parigi to Palu which is said to be manageable in 8 hours. Only in the far eastern areas (between the Tolitoli (West Coast) and Tialo (East Coast) areas), crossovers do not seem to exist (which is not surprising as the peninsula here is quite broad). Otherwise, intercoast travelling seems to have been quite common for the hill dwellers and far more common than travelling south or north along the coastline. The latter is the preferred route of travel for the coastal population.

While access to state run electricity (from 18-24 hours) was fairly rare in 1988 outside major centres such as Tolitoli, Moutong and Tinombo, it was found in about seventy per cent of the area in 1993, and may by now cover the whole area. Parigi, Moutong and the area around Tolitoli (i.e. from Tambun up to Lalos (in Galang)) are completely electrified 'around-the-clock'. In most of the villages not yet connected to the central net there are small generators which are owned privately or by the village, and generally serve between 5 and 30 houses.

Together with electricity, television has become available in nearly every village. In the vicinity of the subdistrict capitals, the state-run television station can be received. In other areas, parabolas are used which give access to several South-east Asian government and private television channels. All this is very recent, the first parabola antennas having been set up in mid-1988.

Apart from Tolitoli city, telecommunication has been possible since 1991 in Parigi and in Moutong and is already widespread. Other subdistrict capitals were soon to follow this path.

2.4.7 Education

Within the older generation (50 and above), people who have received some formal education (at most three years in elementary schools run by the Dutch) are an exception. For the young people (under 20), not having been to elementary school is the exception (generally found only in the inner hill and in some of the middle hill regions).

There are elementary schools in nearly every coastal settlement, down to rather small hamlets. From all the places visited there was just one (Bigalo, which is a Dusun of Bambapula) where no school existed. The closest school, however, was just 3 km of easy walking. In the 1990s, efforts have been undertaken to expand the system to the mountain areas. And there are already several schools in the Lauje mountain regions between Sidoan and Palasa.

In addition, a strong effort is being made to provide for a close-knit net of Middle Schools (SMP). The goal is to have an SMP in every coastal village. There is also at least one High School (SMA) in every Kecamatan.

[54] Davis (1976:6) reports that in 1972 it took 16 hours to travel the ninety kilometers from Palu to Parigi, the road being negotiable only by jeeps. In 1993 there was a continuous stream of traffic of vehicles of all kinds (including private cars and large public buses) between these two towns, and the travelling time was down to two hours.

2.4.8 Cultural practices and religion

Very little work has been done on the cultural anthropology of the people in the Tomini-Tolitoli area. There is only one in-depth study which is directly and primarily concerned with a group of Tomini-Tolitoli people, i.e. Nourse's study of birth rites and healing knowledge among the Lauje in the Tinombo area (Nourse 1989, 1996). From the texts and songs recorded during this survey, it appears that many cultural practices, including a variety of forms of ritual speaking, are very similar to those found in other indigenous communities of Central Sulawesi, as described in Wumbu et al. (1973), Masyhuda (1977), Atkinson (1984, 1989), and Gregerson (1993). Furthermore, as discussed in detail in Nourse's work, the native practices of at least the coastal and middle hill populations appear to be heavily influenced by various forms of Islam.

The present-day dominance of Islam is also witnessed by the fact that there is at least one mosque in every village and that, at least in the coastal zone, attendance at Friday prayers is regular and high. Other denominations encountered are Hindu-Bali (in the transmigration projects) and Christian, either Protestant or Pentecostal. The inner hill people practiced indigenous religions until Christian missionaries (from the Minahasa or the Poso areas, and the New Tribes Mission) began to work in the area in the early 1970s. Estimates concerning the number of non-Christians among the inner hill population today vary between thirty and sixty per cent. The conversion to Islam was a major factor in the split between middle and inner hill people in the Lauje area two or three centuries ago (cf. Nourse 1989).

Christian congregations are relatively rare on the West Coast. These include a Pentecostal church in Parisan (Sioyong), fellowship Pendau, staff Minahasa, reportedly existing since 1971; Pani'i, a village primarily inhabited by Christian migrators from Kulawi and Minahasa; a Protestant community in Ogowele (Jongin, 'Inapasang, Koala Lais with off-shoots in Janja and Bambanong (Manipi)), staff Minahasa/Poso, fellowship Lauje, reportedly existing since 1976; and a small, also Minahasan-based congregation among the middle hill Dondo in Oyom (Tinading plain), reportedly existing since 1967.

On the East Coast, Christian congregations are somewhat more widespread. In nearly every village between Kasimbar and Moutong there is a church, the fellowship usually consisting of Minahasa and a few Lauje or Tialo. In Ongka it was claimed that thirty per cent of the population is Christian. In the inner hill region Ogoalas (above Lombok) the New Tribes Mission is in operation.

3 *Introduction to word lists*

This is a word list and not a dictionary. One crucial difference between these two formats pertains to the fact that in word lists the relation between a given lexeme in the source language and its glosse(s) is in need of interpretation and further analysis. That is, apart from a number of basic items such as 'eye' or 'pig', the glosses here *do not* provide the precise meaning of the Tomini-Tolitoli lexemes. The gloss is the item in connection with which a given Tomini-Tolitoli lexeme was elicited. In some instances, it clearly does not mean the same thing as the Tomini-Tolitoli lexeme. See §3.7 and §3.8 for examples and further discussion.

3.1 Sources and basic considerations

In compiling the word list used in the survey the following steps were taken. The basis is the Sulawesi Umbrella Word list (SUW), a field instrument conceived by SIL's Sulawesi Programme[1] for a SIL project called *Sulawesi Wordbook*, aimed at producing a collection similar to Reid's (1971) *Philippine Minor Languages* for Sulawesi languages. It is limited to items especially relevant to Sulawesi, consists of 488 entries, and has been compiled from several subset word lists, i.e. Reid's 372-item Philippine word list (less two items), Blust's 200-item Proto-Malayo-Polynesian word list, and various word lists used in SIL surveys in Sulawesi. It covers the following 16 semantic and syntactic categories (given in their original Indonesian phrasing):

1. anggota tubuh
2. hubungan kemasyarakatan
3. kata ganti
4. binatang
5. tumbuh-tumbuhan
6. alam dunia
7. buatan manusia
8. kata sifat

[1] The compiler wishes to thank Timothy Friberg and the other members of the SIL Sulawesi Programme for making this list available both in print and on diskette, which saved a lot of work. The six pages of annotations on individual items accompanying the list as well as Michael Martens' 2-page manuscript "Errors on Word lists" (August 1987) proved very helpful to a newcomer to the field.

9. warna
10. tata bahasa
11. nomor-nomor
12. posisi
13. waktu
14. kata kerja
15. kebiasaan
16. kata tanya

Items pertaining to §2 (*kata ganti*, item No. 97-103 and 321-323) do not appear in the following lists, but in §3.8.2.2-3. Similarly, numerals (§11, item No. 327-339) are discussed in §3.8.13.1. Otherwise, all items of the SUW may be found in the following Tomini-Tolitoli word lists, with the exception of some kinship terms (No. 85-92) which do not exist in Tomini-Tolitoli languages (see §3.8.2).

The SUW was then cross-referenced with the version of the Holle list presented in Stokhof et al. (1980). This was done automatically, with identity of the Indonesian glosses taken as the basis of comparison.[2] Then, further items from the Holle list, which consists of 1,486 entries, were added. Not all of the items were included since the New Basic List compiled by Stokhof et al. (1980:22ff) combines three earlier versions of the Holle list, which in some cases leads to overdifferentiation (e.g., New Basic List No. 319 'teman, sahabat', 320 'sekutu, teman', 321 ditto, and 322 'sahabat, teman perempuan'). Sometimes a difference in Dutch or English is not rendered in the Indonesian translation (e.g., No. 851 'mouse = tikus' and 852 'rat = tikus'). It is not, of course, the purpose of this New Basic List to provide a field instrument for present-day fieldwork but, rather, to make the vast amount of lexical material collected with the help of the Holle lists more accessible. Considering this vast amount of data from many hardly known Indonesian languages contained in the Holle lists, it seemed worthwhile to provide for a certain amount of overlap and cross-referencing with these lists which — it is hoped — will be useful to the comparativist.

The third step in compiling the word list used in the fieldwork was to cross-reference the 'combined' Sulawesi Umbrella/Holle-list with the word list used in the *Comparative Austronesian Dictionary*[3] (Tryon 1994). This was also done automatically by comparing the English glosses in both lists. Furthermore, a few items from the Comparative Austronesian Dictionary word list (CADW), which seemed to be of interest but were missing from the other lists, were added to the present fieldwork list.

The CADW is modeled on Buck's (1949) *A Dictionary of Selected Synonyms in the Principal Indo-European Languages* and thus has a definite Indo-European bias (which also holds for the Holle list). The numbering system used in the CADW, however, is very flexible (counting by tens and hundreds), and it was not too difficult to accommodate the items

[2] Since computers cannot discern homophones and synonyms, such an automatic comparison is, of course, full of mistakes and omissions. An attempt was made to eliminate mistakes based on homophony, but synonyms were cross-referenced only to a limited extent.

[3] Ulrike Mosel drew the compiler's attention to this project. The lists she prepared for Tolai and Samoan were used as the source for the present list before the dictionary was actually published.

presented here in this system. The following semantic areas are dealt with in Buck's dictionary (and the CADW):

1. physical world in its larger aspects
2. mankind: sex, age, family relationship
3. animals
4. parts of the body; bodily functions and conditions
5. food and drink; cooking and utensils
6. clothing; personal adornment and care
7. dwelling, house, furniture
8. agriculture, vegetation
9. miscellaneous physical acts and those pertaining to arts and crafts, with some implements, materials and products
10. motion; locomotion, transportation, navigation
11. possession, property, and commerce
12. spatial relations: place, form, size
13. quantity and number
14. time
15. sense perception
16. emotion (with some physical expressions of emotion); temperamental, moral, and aesthetic notions
17. mind, thought
18. vocal utterance, speech, music
19. territorial, social, and political divisions; social relations
20. warfare and hunting
21. law
22. religion and superstition

Since every semantic classification contains many debatable decisions, it seemed more useful to follow a system which has been used in other projects, rather than devising a system of one's own. A simple alphabetical mode of presentation did not seem very useful since any decision as to which language was to provide the basic alphabetical order (one of the Tomini-Tolitoli languages? Indonesian? English?) would result in impractical and distorting orderings for all other languages. A semantically based ordering, despite its many inconsistencies and 'arbitrary' decisions, seems to be of more practical value, both to the lexical semanticist and the historical linguist, insofar as it makes the identification of polysemy, synonyms, and cognates easier. It is for this reason that a semantically based arrangement of the data was chosen here. It should be noted, however, that it is a loose, often merely intuitive semantic arrangement tailored to the practical purposes just mentioned and not one based on an explicit and detailed semantic framework.

The resulting word list had 1,305 entries (including pronouns and numerals). During elicitation, several of the items turned out to refer to unknown concepts or to be overdifferentiated (see §3.8). These have been dropped from the list. In many instances, however, the contributors supplemented other items related to the item elicited or denoting a difference not provided for in the list. As far as the semantics of these items could be reasonably well determined, they were added to the list. Furthermore, David Zorc (pers.comm. in 1991) drew the compiler's attention to the fact that some culturally very significant terms (such as 'white hair', 'leech' and 'crush lice') were missing from the CADW list. These were also added to the current list. Thus in the present version the list consists of 1,478 entries (without pronouns, deictics, numerals and measure words). The newly added entries account for many of the entries where items for only one or two languages are given since these additions obviously could not be elicited systematically.

In order to make the data accessible from as many practical points of view as possible, extensive indices have been added. These contain, on the one hand, cross-references to all the word lists mentioned (and, in addition, the standard 100- and 200-item lexicostatistical word lists), and, on the other hand, alphabetical indices for the base forms of all the languages involved (English, Indonesian, and all the Tomini-Tolitoli languages).[4]

3.2 Geographic location and reliability of the word lists

The basic goal of the survey was to obtain a complete word list for each of the languages in one location (preferably the central area) and to check parts of it at different locations for dialectal variation.

In assessing the overall reliability of the data presented here, it should be recalled that they were collected during a survey in which no more than a day or two was spent in many locations and in which no more than 20 days were spent in any one location. Thus, the data is in no way comparable to the kind of data and analysis resulting from a several years long study of a given dialect in a fixed location. Furthermore, the following general factors have to be taken into account in evaluating the reliability of the word lists:

a) The main contributors are generally educated people living in the coastal villages who are proficient in several languages, including Indonesian. Though considerable care has been given to work only with contributors who use the language daily at least in some contexts, for only a few of them can it be said that the Tomini-Tolitoli language is used nearly all the time.

b) Nearly all of the contributors are male. This is due to the fact that Islam is the dominant religion in the area. It was not considered appropriate for the compiler to work with women. In fact, only in a few instances it was possible for the compiler to communicate directly with women (and there were always other males present). Furthermore, most contributors belong to the socio-economical elite in their area (cf. §2.4.2.). Little sociolinguistic variation has been documented.

c) Though the proficiency in Indonesian of the major contributors can be generally judged as good to quite good, only a few of them had an excellent command of Indonesian.

[4] See below, §3.3.2, on the procedure of establishing base forms for the Tomini-Tolitoli languages.

Some words included for elicitation were not known to them. Every once in a while they had difficulties in coming up with fitting Indonesian equivalents or translations.

d) The compiler's proficiency in Indonesian at the beginning of the survey was not quite adequate to the task of conducting intricate semantic discussions, which clearly affected the accurateness of some of the Dampelas, Pendau and West Coast Lauje data. A large percentage of the more problematic items, however, were rechecked in 1993.

Working through the complete 'original' (1,305-item) list took between one and two weeks. The usual procedure was to go through 100-200 items per session, note them down (together with comments and additional items supplemented by the contributors), and, finally, to tape record the items at the end of each session.

In the best of circumstances, the whole list was gone through with two or three native speakers, one of whom mastered Indonesian very well, while the others had a very good command of the Tomini-Tolitoli language. The working conditions (and, as a consequence, the reliability of the list), however, differed in each case, as can be seen from the following comments about each list:[5]

- For *Balaesang*, only some 700 items (including all of the SUW) were recorded in Rano and checked with the main contributor, Bapak Tombu Abas.
- For *Pendau*, only parts of the list have been recorded and cross-checked in a variety of locations. A first extensive set of data was collected in Parisan, with Bapak Kun as principal contributor (these data are not coded for location in the Pendau entries of the word list). This set was cross-checked and more data were added at the following locations (the second column gives the abbreviations used in the word list to indicate that the data come from that location):

Siraru (Dusun of Pangalaseang)	SRU
Ou (Dusun of Pangalaseang)	OU
Agisolo (hamlet in Bambapula)	AGS
Bigalo (Dusun of Bambapula)	BGL
Koni (Dusun of Tompoh)	KNI
Boangin (Dusun of Banagan)	BGI
Sitadong (hamlet in hinterland of Banagan)	STD
Ogo Kaasi (hamlet in hinterland of Banagan)	OKS

  The most extensive set of additional data was collected in Ogo Kaasi/Sitadong, with Bapak Nurdin as principal contributor.
- The *Dampelas* list was recorded in Talaga, all items having been looked over by the two main contributors, Bapak Lau Malonda and Bapak Mohamad Yamin. Ca. twenty per cent of the items collected in 1988 were rechecked and some more items were added in 1993. Practically all tape recordings of the Dampelas items from Talaga had to be done with Bapak Yamin, whose speech is probably not fully representative in that it is characterised by a heavy use of schwa instead of /e/ in unaccented syllables, the lack of clear lengthening of reduplicated syllables, and a fairly limited use of paragogic vowels. The Talaga set was cross-checked and more data were added in Sioyong (SYG) and in Ou (OU). In addition, some 500 words, 100 sentences and one short story representing the *Dampal* variety of Dampelas were collected in Bangkir and Ogoamas (items from these locations are marked as DMB and DMO, respectively, in the word list).

[5] Information on the profession and education of the contributors can be gained from the list of contributors. Contributors holding a university degree and teachers are, of course, very proficient in Indonesian. More information on the locations mentioned may be found in §2.2.

- For *Taje*, material was recorded in Sidole/Tanampedagi and in Petapa (about 600 items in each location). Since the material from these two locations differs quite significantly, it is presented in two separate fields (TJT and TJP, respectively). In addition, a few items (ca. 100) were elicited (tape recording was impossible) at Singura (in Sienjo). These items are included in the TJT-field (marked as SGA for Singura). No contributor looked through all items, though most items from Petapa were contributed by Bapak Tabu. In evaluating the Taje data, it should be kept in mind that most Taje are culturally middle-hill people, who often have very little knowledge of Indonesian. Though it was generally possible to elicit some lexical items, it often proved quite difficult to elicit different formations involving the same base. Therefore many of the items presented for Taje are less analysed than those for other languages. In Tanampedagi it was in fact necessary most of the time to work with an interpreter who translated Indonesian items into Rai (Kaili). Furthermore, Ampibabo-Lauje speakers were present during all sessions there as well and took part in the discussion of Taje items (both Taje and Ampibabo-Lauje speakers appeared to switch freely between the two languages).
- The *Tajio* list was recorded in Sienjo, all items being checked by the two main contributors, Bapak Hasim Hi. A. Ponutu and Bapak Piet Rumambi. During a brief stay in Maninili (where, according to McKenzie (1991), a different dialect is spoken), some 300 items were cross-checked for dialectal variation. These are marked with MLI in the word list.
- For *Ampibabo-Lauje*, some 600 items were recorded in Ampibabo, all with just one contributor, Bapak Usmán Dg. Pangale. In Sidole (SDL) and in Tanampedagi (TPD) 300 of these were cross-checked and a few additional items were added.
- For *Lauje*, there are two complete lists, one from the East and one from the West Coast. The West Coast list was recorded in Bou, with Bapak Mohammad Saib Singalan as sole main contributor, although there were always two or more other Lauje attending the sessions. Items from this list have been entered only if they differ from the East Coast list (marked with BOU). The main contributors of the East Coast list, Bapak Jamin Lasiaji, Bapak Anwar D. Djumpeter and Bapak Sumardi Korona, come from two villages (Palasa and Tinombo), but belong to one family (and are distantly related to Saib Singalan). Part of the list was recorded in Palu, where Bapak Sumardi Korona works in a government office. None of the contributors had the opportunity to look over all the items. In 1993 the East Coast list was further expanded and about forty per cent of the already recorded items were rechecked with contributors from Lombok and Tinombo, principally Bapak Ambuloli Maraila. Small sets of items were cross-checked at the following West Coast locations, all of which are small settlements of middle hill people:

Bambanong	BBG
Janja	JJA

'Inapasang	IPG
Koala Lais	KAL
Sigumbang	SBG

The Lauje word list also contains a very small number of items that were claimed to be Inner Hill (Gunung) Lauje (GLJ) items. They were reported by coastal Lauje speakers and are deemed by them to be highly characteristic of Inner Lauje variants.

- The *Tialo* list was recorded at three locations (Lambunu (LBN), Ongka (ONK), and Tingkulang), but all items were checked with Bapak Sahir Kasimbuang from Tingkulang, who also contributed about half of all the items on this list. Since Tingkulang is at the very periphery of the Tialo speaking area, bordering on the Lauje area, it may very well be the case that the Tialo variant represented here most comprehensively is more similar to Lauje than other Tialo variants.
- The *Dondo* list was recorded in Malomba, all items were looked through by the two main contributors, Bapak Mohsen Bantilan and Bapak Syafruddin Nasir Punsongonyo. Bapak Bantilan's father was a Totoli, but he himself was born and grew up in Malomba. Bapak Syafruddin has a Lauje father but also lived all of his life in the Dondo area. The 1988 list was expanded and some twenty per cent of the items rechecked in 1993, primarily with Bapak Karim. In addition, Dondo items were collected and cross-checked at the following locations:

Lemba Harapan	LBH
Boangin	BGI
Lais	LAI
Sikotong/Muara Besar	SKT
Salugan	SLG
Oyom	OYM
Kinapasan/Lakatan	KPG
Dulu/Lakatan	DLU
Bonto' Buaya	BBA
Gio	GIO

With regard to items from Lais, which like Malomba is located in the central Dondo area, note that only such items have been included in the word list which differ from the Malomba ones.

- The *Totoli* list was recorded in several places (Nalu, Panasakan, Lalos, Ginunggung, Diule (DIU), and Binontoan (BNT)), but all items were checked with Bapak Usman A. Masyhur, Bapak Musa T. Masyhur, and Bapak Ahmat Nasir in Panasakan. This list was also revised and expanded in 1993, principally with Bapak Ahmat Nasir.
- The *Boano* list was recorded in Bolano together with Hasan Basri, a Palu-based Indonesian linguist. We split the elicitation sessions, but were both present at all recordings. None of the contributors had the opportunity to check all the items.

3.3 Format of entries

3.3.1 General format

Each entry begins with the English gloss and a 5-digit CADW number. The first 2 digits of this number refer to the semantic areas listed in §3.1 above (01-22), the last 3-digits to sub-areas thereof. Note that apart from the broad numbering in tens and hundreds most entries with smaller numbers are invented by the compiler and thus do not have corresponding entries in the CADW. In some cases the CADW system had to be expanded by adding new tens and hundreds, but with very few exceptions none of the established CADW entry numbers were altered. Thus, if you happen to know that CADW No. 08.540 is 'root', you may expect to find Tomini-Tolitoli equivalents for 'root' under No. 08.540 in the present list. And since no No. 08.542 can be found in the CADW master list, you may not know exactly what to expect under this number, but it should be closely related to 'root' (in this case, it is 'main root'). And since there is no 08.580 in the master list, again you will not know exactly what it stands for. But since the preceding numbers refer to parts of plants (root, branch, leaf, flower), you will not be surprised to find 'thorn' there.

The Indonesian gloss given in the line below the English gloss is the one used in elicitation or, in the case of items added by the contributors, their translation. The next rows are filled with the forms from the Tomini-Tolitoli languages, each row beginning with an abbreviation of the language name in capital letters. The order (broadly reflecting the geographical order of the languages) is the following:

BAL	Balaesang
DAM	Dampelas
TJP	Petapa Taje
TJT	Tanampedagi Taje
PEN	Pendau
TAJ	Tajio
AMP	Ampibabo-Lauje
LAU	Lauje
TIA	Tialo
DON	Dondo
TOL	Totoli
BOA	Boano

If a row for a particular language is missing, the item in question was not recorded for this language.

3.3.2 Base forms

Generally, the non-affixed stem serves as the base form for a lexical entry. In English and Indonesian this is unproblematic (given the lexicographic standard). For Tomini-Tolitoli languages, however, it is not always clear what the base form is. This is due to reanalysis

processes which are presently taking place in these languages (cf. Himmelmann 1991). Thus, it may occasionally be doubted whether a form that seems to be an affixed form from a comparative perspective is actually perceived as affixed in these languages. The following considerations were important in establishing the base forms:[6]

a) only forms judged by the contributors to be a possible word-form in their language are used as base forms (an exception to this basic rule is stated in the next paragraph). This means that occasionally a form is given as the base form, even if this is 'false' from a comparative perspective. Examples mostly pertain to cases where a prefix-final consonant has been reanalysed as a stem-initial consonant. Thus, the base form for 'nod, be sleepy' (04.624) in Dampelas is *ngantu'*, in spite of the fact that the cognates in the other languages (*antuk* or *antu'*) clearly show that the initial /ng/ in Dampelas is non-etymological. The same holds for forms containing (historically) the infix *-um-* which is no longer fully productive in Tomini-Tolitoli languages (e.g. the base form *dumandu'* for 'nod, be sleepy' in Boano). Finally, there are base forms clearly containing the third person singular possessive suffix (*-na/-nyo*). This suffix is considered to be part of the base form if the stem never occurred without it, e.g. Tialo *buntingonyo* 'hill' (01.222).

b) an exception to the basic rule just stated was made when the affixed forms elicited for a given lexeme allow the analysis of a base form despite the fact that the contributors were unable to give one or volunteered a different one. For example, the two affixed forms for 'live' in Tialo, *tumubu* and *pinetubu* (04.740), allow the establishment of a base form *tubu*. This principle, of course, can only be applied to forms of an individual language, not when comparing the languages.

See §3.5 for some notes on the affix lists found in many entries.

3.3.3 Format and conventions used within fields

When more than one translation for a given Indonesian item was offered by the contributors during elicitation, all of these translations are included in the same field, separated by commas.[7] The order is of no particular importance, but reflects the order in which the translations were volunteered.

The same holds for the affixes listed subsequent to a given base form: their order also does not follow any special system, but largely reflects the order in which the affixed forms were volunteered. Furthermore, there is no claim to completeness with respect to these affixes. In general, it was not possible during the survey to check out all possible affix combinations for a given base form. Thus, the affixes listed here are generally those volunteered by the contributors without further inquiry. In some instances, however, a conscious effort was made to elicit a number of affixed forms for a given item, in particular in those instances where the base form was not readily determinable (see also §3.5).

[6] As far as the compiler is concerned, at this point there is nothing of theoretical importance at stake here, but this somewhat lengthy exposition is still necessary since it has practical relevance when compiling and using the alphabetical indices.

[7] Flora and fauna items separated by commas usually refer to different species of one genus or family. Which species was intended, could often not be determined. See also §3.8.3 and §3.8.8.

Further comments by the contributors on the meaning of a particular item are enclosed in parentheses ( ). They are usually in Indonesian, as stated by the contributors. For example, in the entry for 'swamp' (01.380), the Dampelas field reads: *bonto (di hutan), ba'ung (di pinggir danau)*. This means: the Dampelas word for a swamp in the woods is *bonto*, while *ba'ung* denotes a swamp on a lakeside.

(H) and *(K)* mark items pertaining to particular speech styles: H = *halus*, i.e. refined or formal speech; K = *kasar*, i.e. colloquial or rude speech.

Indonesian terms *laki-laki* and *perempuan* are abbreviated *(l-l)* and *(per)* and mark an item pertaining only to males or to females, respectively.

Abbreviations for village names (e.g. BOU, OYM) precede items which were not recorded in the location where the main list for the language in question was recorded (see §3.2 above). Abbreviations for village names preceded by a plus sign (e.g. +BOU, +OYM) indicate that the item appearing to the left of the abbreviation was recorded in the village at hand as well.

Single quotation marks (‘’) enclose translations which the contributors deemed more appropriate for a given item than the gloss in the Indonesian field that was used in eliciting this item. Again, Indonesian is commonly used in these translations. English translations are by the compiler. They are based on somewhat lengthy explanations of the meaning of the item given by the contributors.

Phonetic brackets [ ] enclose specifications of, or variations in, the pronunciation of a given item as they appear in the tape recordings. The number occasionally included in the brackets indicates that the variation occurred only in one of the (usually two) recordings of a given item. Thus, [2. melénsa'e] in the Lauje entry 01.214 means that the second tape recording of *melesa'E* 'muddy' is [melénsa'e] while its first recording is as predicted by the spelling (i.e. [melésa'e]) and thus does not need to be represented phonetically. In the case of a few very frequent allophonic variations, in particular the allophones of /b/ (see §3.4.1 below) and the variation with regard to initial and final glottal stops and vowels (see §3.4.9 below), sometimes only the particular allophone is indicated. For example, [ɸ] means that a /b/ in the preceding word-form was pronounced as a voiceless bilabial fricative, one of a number of possible allophones of /b/ before a high back vowel. And ['] indicates that the preceding word-form was articulated with an optional final glottal stop.

A slash (/) separates word-forms that the contributors considered to be mere variants of each other. The difference between variants indicated by a slash and those enclosed by phonetic brackets pertains to the attitude of the contributors: the former were mentioned and discussed during elicitation, the latter noted only later when listening to the tapes (see also §3.4 below). The notation */E* after a word indicates that the word in question was pronounced once with and once without a paragogic vowel (see §3.4.7). In the Taje fields, variants typically come from two different contributors.

A question mark (?) indicates uncertainty or uneasiness with a given item, gloss, or cross-reference. In the English and Indonesian fields, it usually signals doubt about the correctness of the gloss or indicates lacking specificity of the gloss.

A raised tilde (˜) indicates that no tape recording was done. If it appears at the very end of the entry, separated by a space, it means that none of the forms listed preceding it have been tape recorded. Otherwise, it refers specifically to the item to which it is attached.

An exclamation mark (!) means 'sic!", i.e. what might appear to be a spelling error is not one.

→, +, and = followed by an CADW No. are symbols used in cross-referencing items:

= CADW means the item in question is the same one as the one found under the given CADW No., and that this identity has been noted by the contributors.

+ CADW means that the item(s) found under the given CADW No. may be added to the item(s) in the field at hand, as further possibilities for translating the Indonesian gloss into a Tomini-Tolitoli language.

→ CADW means that it may be useful to look up the given CADW No. in order to find different meanings of the same lexeme, other word-forms of the same lexeme, or possible cognates. This cross-reference appears in the Indonesian field if such a relation holds for all or nearly all the Tomini-Tolitoli items listed in the entry. Otherwise, the cross-reference appears directly after the item to which it pertains. Some of these cross-references are further discussed in §3.8 below. Note that this kind of cross-referencing has not been done on a systematic basis. Instead, it reflects often incidental observations which occurred during elicitation. Straightforward homophones are usually not cross-referenced since they may easily be spotted by consulting the indices.

3.4 Orthography and notes on segmental phonology[8]

The orthography used for the Tomini-Tolitoli languages follows the Indonesian standard, which in turn is very similar to the IPA standard. The following graphemic conventions may be confusing to those not familiar with the Indonesian system:

<ng>	velar nasal [ŋ]
<ny>	palatal nasal [ɲ]
<y>	palatal glide [j]
<j>	palatal voiced stop [ɟ]
<'>	glottal stop [ʔ]

There are hardly any sounds in Tomini-Tolitoli languages which deviate from the Indonesian inventory and, therefore, only a few symbols are used which are not known to Indonesian. These will be discussed in the following sections.

Throughout this work the spelling reflects *segmental alternations* that occurred at the time of tape recording. These variations pertain in particular to the lateral (primarily in intervocalic position), the glottal stop (usually in word-final position), and to final nasals (variation between /n/ and /ng/). Thus, one should not be surprised to find an item spelled with a final glottal in one instance and without it in another (often in a different collocation).

[8] For a sketch of the phonology of the Tomini-Tolitoli languages, see Himmelmann (1991). At the time when this paper was written, not all problems regarding the analysis of glottal stops had been solved (see §3.4.9 below). Furthermore, even in those instances where a glottal stop had been identified as part of the underlying representation of a given lexeme it was not indicated in the spelling. Note in particular the following items which in the present book are now represented with a glottal stop: in example (10b) *alipapaa* → *'alipapaa*, in (13c) *moupu* → *mo'upu*, in (19d) *odo* → *'odo*, in (20c) *aniong* → *'aniong*, in (31a) and (39a) *olong* → *'olong* and *inolong* → *'inolong*, in (31b) *ala'ais* → *'ala'ais* and *inala'aisE* → *'inala'aisE*, and in (39d) *apal* → *'apal*. In addition, *liio* in example (35b) is incorrectly spelled as *lio* and *mo'otoi* in (15a) should actually be *mo'ootoi*.

It is highly likely that some of these alternations are grammatically determined (final glottal stops, for example, tend to be dropped in phrase-internal position). The others (for example, the n/ng-alternation and l-dropping) appear to be sociolinguistically motivated and to reflect current changes in progress.

Apart from these very common and widespread alternations represented in the standard spelling, there are other, apparently more sporadic variations in the pronunciation of some items, which are given in square (phonetic) brackets. For example, the entry 04.290 'throat' for Dampelas reads *gorogo'* [grogo']. This means, that the item written down as *gorogo'* during elicitation was articulated as [grogo'] when the word list was recorded. Obviously, the representation here involves assumptions about a standard (or underlying) form and its variants. In general, the form appearing in the written notes was considered to be the standard form, a procedure which worked well in most instances. However, a number of instances remain for which the decision as to what should be considered the standard form is open to dispute. Furthermore, it should be noted that the distinction between common and widespread alternations (rendered in standard spelling) and more sporadic variants (given in phonetic brackets) is certainly not always an easy one to draw and thus also open to dispute.

3.4.1 Labial fricatives

In the three southern Tomini languages Balaesang, Taje and Tajio a labial fricative is part of the basic phoneme inventory, possibly due to the substantial number of lexical items borrowed from the neighbouring Kaili languages. A lot of variation exists with respect to the realisation of this fricative, both within a given language and across the three languages. The standard realisation in Balaesang appears to be a voiced bilabial fricative (written as <ß>), while in Tajio it appears to be a voiceless one (written as <f>). The Tajio contributors in Maninili, however, primarily used voiced bilabial fricatives. In the Tanampedagi variant of Taje, the most frequent realisation is a voiced labio-dental fricative (written as <v>). Finally, of the four contributors for the Petapa variety of Taje, two used a voiced bilabial fricative more or less consistently, one consistently used the glottal fricative [h], while the last one preferred voiceless bilabial fricatives. Somewhat arbitrarily, the voiced bilabial fricative (written as <ß>) is here considered the standard realisation.

In most other Tomini-Tolitoli languages, with the exception of Totoli and Dampelas, the voiced bilabial fricative is a regular allophone of /b/ before a high back vowel (/u/). For example, Lauje *bu'u* 'bone' is generally pronounced [ßu'u] in Bou (West Coast). This rule does not apply when /bu/ is preceded by a nasal. Hence, *'umbung* 'fingernail' is [umbuŋ] and not [*umßuŋ]. Sometimes the fricative realisation is preserved when a /bu/-initial stem is infixed with *-in-*, for example, Lauje *binuata'* 'hauled ashore' (base *buat*) was recorded both as [ßinuata'] and as [binuata'].

As with the phonemic labial fricatives, the pronunciation of the allophonic fricatives varies between a voiced bilabial fricative [ß], its voiceless equivalent [ɸ], labio-dental fricatives ([v] and [f]), and, in Boano, the glottal fricative [h]. The voiced bilabial fricative is the most frequent allophone,[9] which therefore is not specifically indicated. That is, the grapheme sequence <bu> generally represents [ßu] in the following five languages: Pendau, Lauje, Dondo, Tialo, and Boano. If another realisation for the fricative is chosen, this is indicated by

[9] For younger Lauje speakers from Bobalo, Palasa and Tinombo (all East Coast villages) it may be the case that voiceless [ɸ] is the most frequent allophone.

including [v], [f], [h][10] or [ɸ] in the entry (for example, [v] after a base means that the sequence <bu> was not pronounced as [ßu] but as [vu]). There is, of course, also the possibility that the /b/ is not fricativised, i.e. <bu> is articulated as [bu]. This situation is indicated by including [b] in the entry. Thus, for example, the following Tialo entry (08.945)

(6) robung E [b]

means that *robung E* 'bamboo shoot' is articulated as [róbuŋe] in the recording.

In Ampibabo-Lauje, the realisation of /b/ as [ß] before /u/ is not as regular as in the other Tomini languages (hence it would be slightly misleading to call this an automatic alternation). In the entries for this language, the realisation of /b/ is indicated for each recorded /bu/-sequence.

Finally, it should be noted that the labio-velar glide /w/, which occurs in a few loans, may also be realised as a bilabial or a labio-dental fricative in Pendau, Lauje, Ampibabo-Lauje, Dondo, Tialo, and Boano. These fricative allophones of /w/ occur before all vowels and do not alternate with [b]. Therefore, they clearly differ from the fricative allophones of /b/.

3.4.2 Laterals, in particular word-final /l/

The standard realisation of the lateral, which is part of the phoneme inventory of all Tomini-Tolitoli languages, is a voiced alveolar lateral. It is common to find slightly retroflexed realisations after back vowels. In Totoli, a retroflexed lateral flap is the regular realisation after back vowels, a realisation sporadically also found in other languages (primarily on the West Coast). In Dondo, the neighbour of Totoli on the West Coast, the retroflexed lateral flap after back vowels is in fact fairly frequent, though less regular than in Totoli.

In Boano and Totoli word-final laterals are generally deleted, the preceding vowel being distinctly overlong and intonated with a high pitch (in Boano, this generally does not happen after /i/ and sometimes not after /e/, in Totoli it happens after all vowels). Since this is a fairly conspicuous feature, the final /l/ in these words is written as a raised <l> (as in Totoli *kiki*^{l} [kikiˈl::] 'bite').

In Totoli, the final /l/ 'reappears' when suffixes are added (e.g. the locative voice form of *kiki*^{l} is *kikilan*). In Boano, however, the final lateral does not reappear. Suffixes are simply added to the base without the final lateral. Furthermore, the traces left by the lateral on the preceding vowel (overlength and high pitch) also disappear. For example, *otoan* is the locative voice form of the base *oto*^{l} 'harvest' (08.415), *tugaan* [tugáːn] 'make a hole with a dibble' the locative voice form of *tuga*^{l} 'dibble' (08.281). In other words, stem-final laterals are lost when suffixes are added.

This loss of stem-final laterals in Boano is possibly related to another phenomenon found throughout the group: intervocalic laterals can be omitted. The frequency with which that happens differs quite distinctly across the languages. Boano clearly favours omission to the point that deletion of intervocalic laterals is the rule rather than the exception (i.e. many bases are very rarely indeed articulated with intervocalic laterals, but these laterals still occur every once in a while and thus have to be considered part of the synchronic segmental shape of the

[10] The symbol [h] represents an allophone of /b/ only in Boano. In the other languages, [h] represents the aspirated onset of an initial vowel (see below).

lexeme). In the southern Tomini languages, omission of intervocalic laterals occurs only very sporadically.

3.4.3 Final nasals

In some of the Tomini languages, in particular in Lauje, a considerable amount of variation exists with regard to the realisation of final alveolar nasals (reflecting a general drift towards a reduction of final consonants, cf. Sneddon 1993 and Himmelmann 1997). Most importantly, final alveolar nasals are often realised as *velar* nasals. For example, Lauje *lengan* 'lie supine' (12.142) has also been recorded as *lengang*. See also §3.5.5 on velar fronting.

One Pendau contributor had a tendency to add a velar nasal to vowel-final words. Thus, for example, *sarao* 'small areca nut' (08.676) was recorded as [saraong].

3.4.4 Geminate consonants

In Totoli and Boano, two identical CV syllables may be reduced to a geminate consonant plus vowel as in Totoli *sasaakan* → *ssaakan* 'all', *molili* → *molli* 'yellow', *kuku* → *kku* 'foot', etc. See also the note on accented CV-reduplication in §3.5.10.

3.4.5 Mid front vowel /e/

A lot of variation occurs in the pronunciation of the mid front vowel /e/, which ranges from a fairly close [e] to a rather open [ɛ]. Occasionally, even an [æ] may be heard. The close variant tends to be chosen when /i/ follows, while the open variants are found in open syllables and, in particular, when /e/ is phonetically long and/or stressed. Other factors remain to be investigated.

3.4.6 Vowel sequences

Sequences of two identical vowels (*aa*, *ii*, etc.) occur in all Tomini-Tolitoli languages. The pronunciation varies between a phonetically long vowel and a sequence of two vowels set off by a weak vowel onset. Occasionally, a (non-phonemic) glottal stop is inserted in between the two vowels, as in the following Balaesang examples: *metataa* [metataˈa] 'laugh' (16.250), *moboo* [moboˈo] 'rotten' (05.125). Apart from Balaesang this phenomenon is found with moderate frequency also in Petapa Taje and in the Sidole variety of Ampibabo-Lauje (e.g. *petaang* [petaˈaŋ] 'wait' and *si'oi* [siˈoˈi] 'you (SG)'). Note that in many Boano bases a glottal in between two identical vowels is part of the basic representation. That is, words such as *ka'an* 'eat' and *tu'u* 'dry' are always pronounced with a glottal stop (but there are also bases in which two identical vowels occur next to each other without a glottal stop inserted in between them, e.g. *laas* 'wash', *tuu* 'sleep').

In the southern Tomini languages, there is an additional strategy for avoiding phonetically long vowels. In these languages, the tendency exists to shorten sequences of two identical vowels. If such a vowel sequence occurs at the end of a word, it is often articulated as a short stressed vowel, e.g. Balaesang *melaang* [melaŋ] 'naked'. Here a vowel sequence was

considered to be part of the basic representation of the lexeme if at least in slow, careful speech a phonetically long vowel was used in articulating the item.

In Taje and Tajio the tendency to shorten phonetically long vowels occurs primarily in non-final syllables, as shown by the following alternations: Tanampedagi Taje *mombees* 'tie' vs. *nivesi* 'tied' (base *vees* 09.160), *tavu mpaa* 'calf' vs. *tavu mpanya* 'her/his calf' (04.352). Diachronically, this has the following correlate: In Taje and Tajio, suffixes or epenthetic vowels have been reanalysed and thus become part of the base. In those instances in which the base to which the suffix or epenthetic vowel was added contained a long vowel, the base vowel is now short, e.g. Petapa Taje *diti* 'pull' (09.330), *pesi* 'painful' (04.840) (the cognate bases in the other languages all have phonetically long vowels).

3.4.7 Paragogic vowels

In the northern Tomini languages (except Ampibabo-Lauje) and, much less frequently, in Dampelas *paragogic vowels*[11] occur. These vowels may be added to consonant-final words in isolation and, in context, when occurring at the end of a phonological word. In most languages the paragogic vowel is a mid front vowel (/e/, orthographically represented by a capital <E>), but in Dampelas and in the varieties of Lauje spoken in small West Coast hamlets (Bambanong, Sigumbang, Koala Lais, 'Inapasang) it regularly echoes the last vowel of the stem (thus <I>, <A>, <O>, <U> also occur). That these vowels are paragoges is evident from two facts: first, they disappear when suffixes are added; second, they do not cause stress to move to the penultimate syllable (i.e. words with a paragogic vowel are stressed on the ante-penultima, compare Lauje *luba'E* [lúba'e] 'hair').

In other Sulawesi languages paragogic vowels are claimed to be a purely phonological phenomenon (see Sneddon 1993 for a survey). The conditioning factors for the Tomini languages remain to be investigated in detail. In Tialo, paragogic vowels seem to occur very regularly at the end of every consonant-final (phonological) word. In Dondo, Dampelas and Lauje, however, use of the paragogic vowel does not seem to be obligatory in the appropriate phonological contexts. In fact, closer inspection of elicited clauses and texts in Lauje reveals that at least in this language use of paragogic vowels is not purely phonologically conditioned. Instead, morphosyntactic factors as well are involved. This issue is further discussed in Himmelmann (1997).

In the word list, the lexical data are presented with paragogic vowels whenever these occur in the tape-recordings. That is, only those paragogic vowels which were actually recorded on tape are documented here. By default, then, no paragogic vowels are indicated in all entries not recorded on tape. The non-occurrence of a paragogic vowel in a given entry should not be taken to imply that use of a paragogic vowel is impossible in principle for the item in question. Instead, it simply means that no paragogic vowel was used on the specific occasion when the item was tape-recorded.

In the entries in the word list, the paragogic vowel is separated from the base by a blank (e.g. the Lauje entry for 'hair' (04.140) is *luba' E* rather than *luba'E*). In the case of affixes, it is added to those affixes with which it was recorded on tape (e.g. an entry such as Lauje *lolog me-E* 'walk' (10.450) means that the form *melologE* [melóloge] was recorded for the base *lolog*). If a speaker produced a given form both with and without a paragogic vowel during

[11] This term is used by Maryott and Sneddon for a similar phenomenon in the Sangiric languages (cf. Sneddon 1984:25f).

tape-recording, this is indicated by */E*. For example, the Lauje entry *lindug /E* 'earthquake' (01.450) indicates that this base was recorded both as [líndug] and as [línduge]. Similarly, the entry for 'hunt' (20.610), i.e. *gubas mo-/E*, represents the recording of both [mogúbas] and [mogúbase].

In Boano, something similar to a paragogic /e/ occurs only after word-final /y/. This /e/ added to /y/-final words is similar to a paragogic vowel in that it does not change stress. It differs, however, from the paragogic vowels discussed above on a number of counts: first, there is the restriction to final /y/ while the paragogic vowels in the other languages occur after all final consonants. Second, the Boano paragogic /e/ is overlong and the preceding /y/ is hardly perceptible.[12] Thus, *udoyE* 'nickname' (18.285) is pronounced [údoe::]. Third, the Boano paragogic /e/ is not deleted when affixes are added. For example, 'his/her nickname' is *udoyéna*, with the /e/ being stressed and articulated without any extra lengthening.

There are only a few words in Boano (seven have been encountered so far) in which this phenomenon is found. The extra final /e/ in these words is also represented by <E>, which in this case, however, is not separated from the base by a blank (because it does not disappear when suffixes are added). An alternative representation for these words would be to indicate stress on the ante-penultimate syllable (i.e. *údoye* instead of *udoyE*). Note that there is no trace whatsoever of 'regular' paragogic vowels of the kind discussed above in Boano.

3.4.8 Stress

Stress is usually not indicated, since it regularly falls on the penultimate syllable in all Tomini-Tolitoli languages. Only the exceptions to this rule are marked. Primary stress is marked by an acute accent <´>, secondary stress (i.e. lengthening of reduplicated syllables) by a grave accent (`).

Most exceptions to the general stress rule are well-motivated (either a phonetically long vowel is shortened (cf. §3.4.6 above) or stress moves to the first member of a sequence of unlike vowels as in *táipang* 'mango', which occurs as an alternate to the regular *taípang*). In Balaesang, however, stress also occurs on final short closed syllables as in *moontol* [montól] 'sharp'. This includes syllables which are closed by a non-phonemic glottal stop, e.g. *ita* pronounced as [itá'] 'we (exclusive)'.

3.4.9 Initial and final glottal stops (and vowels)

In most Tomini-Tolitoli languages, the glottal stop is part of the phonemic inventory (clear exceptions are Balaesang, Totoli and Tanampedagi Taje). One factor complicating the identification of phonemic glottals in these languages is the fact that there is no fixed and easily perceptible standard for producing them (or, to phrase this more carefully, the compiler was unable to identify such a standard even after he had managed to perceive the glottals of some speakers in some languages very clearly). Instead, the realisation of glottals varies from barely perceptible vowel on- or offsets to stops involving an easily perceptible closure and release of the vocal cords. That is, even in intervocalic position it is not always easy to

[12] In fact, the /y/ was overlooked in Himmelmann (1991), where it is incorrectly claimed that no final glides occur in Boano (1991:63, 69 footnote 26).

distinguish a simple vowel sequence (VV) from the sequence vowel-glottal-vowel (V'V).[13] However, the attempt to insert a glide into a V'V-sequence proved to be a relatively straightforward diagnostic test for glottals in intervocalic position: While contributors often accepted (and sometimes produced) glottal-less articulations of V'V-sequences they consistently objected to the insertion of a glide ([y] or [w]) into these sequences. The insertion of glides into VV-sequences, on the other hand, was generally acceptable.

The glide insertion test proved less useful in the case of initial and final glottal stops. While in some languages vowel-initial words can be identified on the basis of optional onset phenomena (see below), non-phonemic glides are not acceptable in word-final position. The identification of phonemic final and initial glottal stops is further complicated by the fact that both word-initial and word-final vowels may optionally be accompanied by a non-phonemic glottal stop. These optional glottals are auditorily indistinguishable from phonemic glottals in the same positions. Non-phonemic initial or final glottals occur in all Tomini-Tolitoli languages, including the three languages mentioned above where the glottal stop is not part of the phonemic inventory.[14] Thus, in most Tomini-Tolitoli languages the auditory impression alone does not provide a reliable clue to the identification of phonemic initial or final glottal stops.

A more reliable identification of these glottals is provided by morphonological phenomena which are triggered by consonant-final or -initial bases as opposed to vowel-final or -initial bases. The major diagnostic phenomena are briefly reviewed in the following, beginning with those pertaining to consonant-final bases. This will be followed by a brief discussion of specific problems encountered in individual languages.

In roughly half of the Tomini-Tolitoli languages (the exceptions being Taje, Tajio, Balaesang, Totoli and Boano), consonant-final bases are distinguished from vowel-final bases in that consonant-initial affixes cannot be added directly to consonant-final bases. Instead, an epenthetic vowel, usually /o/, has to be inserted in between the base and the affix (cf. §3.5.3). Compare the following examples:

(7) lima-nye 'his/her hand'
luba'-**o**-nye 'his/her hair'

In these examples, the third person singular possessive suffix *-nye* is affixed to a vowel-final and a consonant-final base, respectively. This suffix (and its cognates in other languages) was routinely used as a diagnostic device for determining unclear final segments of nominal bases. In the case of verbal bases (including 'adjectives', i.e. stative verbs), the same function was served by the completive suffix *-mo*, as illustrated by the following examples:

(8) nodua'-**o**-me 'already arrived'
nelampa-me 'already gone'

These two diagnostics proved to be of sufficient generality to be useful in practically all problematic instances in all languages. In fact, suffixing either a possessive pronoun or the completive marker also proved useful in those languages in which no epenthetic vowel is used in between two consonants at a morpheme boundary. In these languages base-final consonants are very clearly articulated when occurring before another consonant. The fact

[13] Thus, for example, in Himmelmann (1991:53 example 13c) Lauje *mo'upu* 'grandchild' is incorrectly represented as *moupu*.

[14] Non-phonemic final glottal stops are indicated in the word list by ['). They are very common in Totoli, Tialo and Ampibabo-Lauje.

that a given base-final segment has been explicitly tested by adding a suffix is noted in the word lists by adding *-nye/-onye* or *-me/-ome* (or their cognates) to the entry.

The diagnostics for base-initial glottals are much more diverse, both within a given language and across the languages. That is, there are not simply one or two prefixes which can be added to all bases and which clearly distinguish between vowel-initial and consonant-initial bases. The most frequently applied tests include the following:

- Reduplication: vowel-initial bases do not allow monosyllabic (CV-) reduplication. Instead, disyllabic reduplication has to be used. For example, it is possible to derive *'à'apalE* 'rather thick' from the base *'apal*. No formally equivalent derivation is possible from the base *emis* 'sweet'. The semantically equivalent derivation from *emis* is *emiemisE* 'rather sweet', which involves disyllabic reduplication (cf. §3.5.10 below).
- Vowel-final prefixes, in particular *'V-* and *mV-*: When a vowel-harmonic prefix (cf. §3.5.1) is added to a vowel-initial stem, this will usually result in a phonetically long vowel (thus *mV-+emis* is [mé:mis]). If, however, such a prefix is added to a glottal-initial stem, the two identical vowels will be articulated separately (i.e. *mV-+'apal* is [ma'ápal]). This test, of course, also works with non-harmonic prefixes. However, since intervocalic glottals are sometimes but very weakly articulated (see above), the results are occasionally less than clear-cut.
- Optional onsets: Vowel-initial stems may optionally be preceded by a labio-velar glide ([w]) or a weakly articulated voiceless glottal fricative ([h]). Thus, *api* 'fire' was often rendered as [^{w}api] or as [^{h}api] – the raising of the [h] indicates that the initial glottal fricative is little more than some kind of aspiration. Considerable variation exists between speakers with regard to the frequency to which such optional onsets are used, with only very few of the older speakers using them fairly consistently.

Note that these diagnostics for initial glottals are less general than the ones for final glottals. While practically all bases allow the addition of a possessive suffix and/or a completive suffix, bases differ quite significantly as to whether or not they can be reduplicated or prefixed with vowel-final prefixes.

The identification of phonemic glottal stops is further complicated by the fact that in some languages these glottals appear to be in the process of being lost (i.e. there is a lot of variation between forms with and without glottals). Thus, it will be useful briefly to review the problem for each language separately.

- **Totoli, Tanampedagi Taje**: no phonemic glottal stops, non-phonemic glottals after vowel-final words very frequent (these disappear when a suffix is added).
- **Balaesang**: no phonemic glottal stops, non-phonemic glottals after vowel-final words very frequent. There is also a tendency to insert glottals into vowel sequences (see §3.4.2 above), which occasionally may give rise to the impression that base-initial glottal stops occur (e.g. *niinung* (base *inung* 'drink' (05.130)) was recorded as [ni'inung]).
- **Lauje, Tialo, Petapa Taje**: phonemic glottal stops occur in all positions and the relevant tests provided consistent results.
- **Dampelas, Pendau**: phonemic glottal stops occur in all positions. Only about half of the relevant items were tested for initial glottal stops and the tests did not always produce satisfactory results.

- **Ampibabo-Lauje**: glottal stops in all positions are quite clearly perceptible in the coastal dialect but appear to be lost in the Tanampedagi/Sidole variant (e.g. *siau* 'I', *lai* 'from'). Here, the addition of non-phonemic glottals after vowel-final words is very frequent.[15] No consistent check was made for initial glottal stops.
- **Dondo**: phonemic glottal stops occur in all positions but appear to be variable. Thus, for example, both *mensuo'omo* or *mensuomo* have been recorded (base *suo(')* 'enter'). Initial glottal stops appear to be particularly variable. That is, the relevant tests rarely produced unambiguous result (e.g. *'V- + (')ayu* 'wood' was rendered as *'a'ayu* as well as *'aayu*). In some instances, the tests in fact produced evidence for non-etymological glottals (e.g. it was claimed that it is possible to derive *'i'imun* from *imun* 'drink' via monosyllabic reduplication, which generally does not apply to vowel-initial bases).
- **Tajio**: Glottal stops in medial and final position are clearly perceptible and consistently used. There was generally no clear auditory or morphonological evidence for initial glottal stops, except for two bases, i.e. *'ees* 'hoarse' (18.112) and *'aug* 'paddle' (10.852). Note that many of the words which are clearly glottal-initial in Lauje and Tialo do not appear to have an initial glottal in Tajio since in these words initial vowels fuse with prefix-final vowels. Compare Lauje *ma'apal* 'thick' with Tajio *maapal* [ma:pal]. More initial glottals appear to be used in the Maninili variant of Tajio where for a number of items a glottal is clearly audible when prefixes/proclitics are added to glottal-initial bases (e.g. *si 'oo* 'you (SG)', *te 'api* 'wing', *ni'olog* 'broken'). However, there is also evidence for variable initial glottals in Maninili. For example, the same contributor produced both *ni'inang* and *niinang* for 'eaten'.
- **Boano**: Glottal stops in medial and final position are clearly perceptible and consistently used (despite the fact that many of them appear to be non-etymological). Only very few examples with initial glottal stops have been recorded. However, initial glottals were not systematically checked.

Finally, it may be noted that at least in some of the languages with phonemic glottal stops there is a tendency to drop final glottals on the phrase level. Thus, Dampelas *ngana'* 'child' becomes [ngana] in the phrase *ngana tampaluit* 'last born child'. And Boano *doa'* 'two' is [doa] in *doa no pu'u* 'twenty' and *doa na gatus* 'two hundred'.

3.4.10 A note on the orthographic representation of clitics

Clitics are generally represented as independent orthographic words, e.g. the spelling for 'fisherman' (20.510) is *to pondagat* and not *topondagat* or *to=pondagat*. However, whenever a combination of clitic plus base seems to have been lexicalised, i.e. a given base hardly ever occurs without a clitic, then clitic plus base are represented as a single orthographic word. This is particularly common for kin terms such as *siama* 'father' or *siina* 'mother' which do not occur without the proclitic personal article *si* unless they are used as terms of address (vocatives). The decision as to which combinations to represent as lexicalised and which not is, of course, a difficult and, at least to some degree, an arbitrary one.

[15] This may be the result of a local convergence between Taje and Ampibabo-Lauje in Tanampedagi since, as noted above, the Tanampedagi variety of Taje (as opposed to the Petapa variety) does not appear to have any phonemic glottal stops.

When (non-lexicalised) clitics are included in the word list entries, their clitic status is indicated by an equal sign (=). For example, the specific article in Tajio is represented as *te=* following the base. The Tajio entry for 'brain' (04.203) thus reads *uto' te=*, meaning that the item was recorded as [teuto'].

3.5 Representing affixes (morphonology)

Many of the entries in the word lists are accompanied by lists of affixes such as *moN-*, *-in--an*, *'V-*, etc. It should be clearly understood that, in general, these affixes represent formatives and not morphemes in the classical sense. The different formatives have been set up purely on the basis of their formal properties (most importantly: their segmental shape). That is, no attempt has been made to distinguish between the different meanings or functions that can be expressed by a given formative. Furthermore, formatives which may be simply variants of each other have in general not been given a uniform representation. Thus, for example, the two suffixes *-an* and *-ang* in Lauje and Ampibabo-Lauje are almost certainly phonological variants of each other (see also §3.4.3 above).[16]

However, this basic procedure has not been followed in all instances. Among other things, there are some vowel-harmonic prefixes which are represented somewhat more abstractly, thus *mV-* representing *mo-*, *me-* or *ma-*, *'V-* representing *'o-*, *'e-* or *'a-*, etc. (see §3.5.1 below). Similarly, *moN-* is an abstract representation for a number of formatives including *mom, mong, mon, mony* and *mo* (cf. §3.5.2). Setting up these more abstract representations is largely a mechanical matter, without the need to take account of the meaning of the items in question. Nevertheless, for a few types of formations the formatives involved could not be identified unambiguously on formal grounds alone. This issue is further discussed in §3.5.11.

3.5.1 Vowel-harmonic prefixes

In all Tomini-Tolitoli languages some prefixes contain a vowel that varies according to the first vowel of the stem. This vowel is represented by capital V. In the Tomini languages, the assimilation rule is as follows: the harmonic vowel is /e/ before front vowels, /o/ before high and mid back vowels, and /a/ before the low vowel. Examples (with the stative prefix *mV-*):

(9)	me-itong	'black'
	me-meas	'white'
	mo-tuug	'dry'
	mo-jolo	'cold'
	ma-basag	'big'

In the Tolitoli languages, the same rule applies with the exception that no assimilation occurs with the high front vowel. Thus, Totoli/Boano *mV- + itom* is *moitom* 'black'.

The most common vowel-harmonic prefixes are stative *mV-*[17] and the stative/existential prefix *'V-/kV-*. In addition, there are a number of complex formatives which in all likelihood

[16] Himmelmann (in press b) includes a preliminary analysis of the voice morphology in Lauje.

[17] Most words expressing a quality ('adjectives') occur with this prefix. However, *mV-* is not simply a stative prefix in all instances. Occasionally, it is also used to express achievements ('become whatever the base denotes'), cf. Boano *madako* 'become big', *mada'is* 'become bad' and *mededе'* 'become small'.

are also vowel harmonic (e.g. *mo'o-/ma'a-/me'e-*, *popo-/papa-/pepe-*). In Pendau, the non-realis undergoer prefix is also vowel-harmonic (i.e. *rV-*, cf. Taje/Tajio *ro-*, Dampelas *ho-*, Lauje *no-*). In Tialo and Dondo, the functionally equivalent prefix *no-* shows a strong tendency for vowel-harmony, i.e. it is frequently realised as *ne-* or *na-* in the appropriate phonological contexts.

3.5.2 Nasal assimilation and replacement (N)

As in many Western Austronesian languages, there is a set of prefixes with a final nasal which assimilates to the stem-initial consonant (before a vowel it is a velar nasal). This assimilating nasal is represented by capital N. Voiceless consonants are usually deleted after the assimilation has occurred, thus morphemically represented *moN-pangkung* is realised as *momangkung* 'beat hard'. The phoneme /s/ is usually replaced by a palatal nasal (rather than the expected alveolar one), e.g. *moN-sunsut* is *monyunsut* 'smoke'.[18] Bilabial and labio-dental fricatives (/ß/, /f/, /v/) are realised as [b] after a homorganic nasal, e.g. Taje *moN-+vava* → *mombava* 'carry' (10.620), Tajio *moN-+feen* → *mombeen* 'give' (11.210). The suffix-final nasal is regularly deleted before nasals and liquids.

The quite numerous exceptions to this basic rule are marked by *%C* in the word list. *C* here represents:

- an 'irregular' replacement such as /n/ instead of /ny/ for /s/, e.g. *moN%n-susu* represents *monusu* 'suck at breast' (rather than expected **monyusu*) and *moN%k-'aug* is *mongkaug* 'dig, paddle', where an initial glottal is not deleted after N but replaced by /k/.
- an exceptionally not deleted voiceless C, e.g. *moN%t-tanong* → *montanong* 'bury' or *moN%s-sau* → *monsau* 'rub'.
- an exceptionally deleted voiced C (symbolized by *0*), e.g. *moN%0-bambal* → *momambal* 'report, inform'.

Occasionally, the NC clusters arising in this process are articulated very much like prenasalised consonants (i.e. with a very reduced, often barely perceptible nasal component). In Taje, in particular with one contributor from Petapa, it was in fact sometimes very difficult to decide whether a given form involved an N-final prefix realised as prenasalisation (e.g. [mo^{m}bobagi] < *moN-bobagi* 'hit') or whether the prefix was simply *mo-* (i.e. [mobobagi] < *mo-bobagi*).

3.5.3 O-epenthesis

In most Tomini languages (but not in the Tolitoli languages) the vowel /o/ is inserted whenever two consonants co-occur at a morpheme boundary. This, of course, does not happen with the assimilating prefix-final nasal N (see §3.5.2 above). All other prefixes end on a vowel, so this process exclusively occurs in suffixation. Examples:

(10) labong-**o**-nye [labongónye] 'his/her house'
na-tasa'-**o**-me [natasa'óme] 'already ripe/cooked'

[18] Totoli is an exception. In Totoli initial /s/ is regularly replaced by /n/, e.g. *moN-sosop* is *monosop* 'suck'. Note that palatal nasals are extremely rare in Totoli and are not part of the native phoneme inventory (cf. Himmelmann 1991).

In Dampelas and the varieties of Lauje spoken in small West Coast hamlets (Bambanong, Sigumbang, Koala Lais, 'Inapasang) the inserted vowel is not /o/ but regularly echoes the last vowel of the stem (cf. §3.4.7 above). Examples from Dampelas are *tutumba'-**a**-nya* 'his/her spear' and *mo-'ungkeng-**e**-mo* 'already tired'.

If the stem-final consonant is a glottal stop and the suffix also contains a glottal stop, a different process, i.e. glottal chain reduction occurs (see §3.5.6).

In the two Tolitoli languages, Totoli and Boano, and in Tajio consonant-initial suffixes can be added directly to consonant-final stems, cf. Totoli *dulus-na* 'his/her sibling', *no-opus-mo* 'finished', etc.

There is also no O-epenthesis in the two varieties of Taje. In the Tanampedagi variety of Taje, consonant-initial suffixes may be added to consonant-final stems without further epenthetic vowels. However, as opposed to the Tolitoli languages and Tajio, there is also the possibility to use an epenthetic /i/ in these contexts. Thus, contributors produced both *antaub-nya* and *antaub-i-nya* 'his/her hut', *naus-nya* and *naus-i-nya* 'his/her sarong', *ogang-mo* and *ogang-i-mo* 'already thirsty', etc. When attempting to elicit systematically which final consonants or lexeme classes favour the insertion of epenthetic /i/ the contributors tended to offer only the forms without an epenthetic vowel.

In the Petapa variety of Taje, there is only a very small number of consonant-final bases. With these, use of epenthetic /i/ is obligatory whenever consonant-initial suffixes are added.

See also the next section for a note on base-final consonants which are added in suffixation in both varieties of Taje.

3.5.4 Adding base-final consonants

In the Petapa variety of Taje, where most bases end on a vowel, it occasionally happens that a base-final consonant occurs when a vowel-initial suffix is added to the base as in *monjau**n**i* < *jau* 'sew' (06.350). In the present corpus, which is far too small to make well-supported general statements, this process is most common with the suffix *-i* and very rare with *-a'o* (the only example is *monaβusa'o* 'drop' < *naβu* 'fall'). The most common base-final consonant is /n/ but examples with /s/ (e.g. *petaasi* 'wait for' < *petaa*) and /k/ (*nisuaki* 'entered into' < *sua*) also occur. Furthermore, the insertion of a base-final consonant appears to be variable as shown by the fact that both *nitulei* and *nituleeni* 'urinated on' (< *tulee*) have been recorded.

In a very few isolated examples, this process is also observable in other languages, in particular for the base *bee* 'give' (11.210), cf. DON *bineenan*, TIA *beeni* or AMPI *beeni*.

In a few Tanampedagi Taje examples a velar nasal can be added to vowel-final words when a consonant-initial (!) suffix is added:

(11) vayonya/vayo**ng**nya 'shadow' (01.630)
sundanya/sunda**ng**nya 'bride price' (02.345)
manginjoyomo/ manginjoyo**ng**mo 'hide (actor voice)' (12.270)

3.5.5 Nasal fronting

A stem-final velar nasal is fronted to an alveolar nasal before vowel-initial suffixes; examples:

(12) tinianang < -in-tiang-ang 'be added to'
ntoenang < ntoeng-ang 'hang s.th. on'
sumbana' < sumbang-a' 'push'
mogansina' < mo-gansing-a' 'destroy'
molinsona' < moN-linsong-a' 'collect, gather s.th.'
gaunime < gaung-i-me 'dig!'

Note that this change does not happen with 'paragogic' vowels and with O-epenthesis (see §3.5.3 above), thus the stative realis completive form of *gansing* is *na-gansing-o-me* 'already destroyed'.

Nasal fronting does not occur in the Tolitoli languages (Totoli and Boano) and in Dondo, Tialo and, probably, Balaesang.[19] In the remaining Tomini languages it occurs fairly regularly. An exception is Dampelas where a lot of variation occurs. Thus, from the base *'ondong* 'longing, desire' (16.270) the following derivations have been recorded: *me'ondonang*, *'o'ondonang/'o'ondongan* and *'o'ondongi*; from *mpoyung* 'whistle' (18.170) *pompoyunang* and both *nipoyungi* and *nimpoyuni*. Other examples: *pangianga'o* and *papanianong* from *pangiang* 'guard' (15.531), *nigulingi* from *guling* 'stem' (10.815), *ponginungon* from *inung* 'drink' (5.130), and *'etintinong* from *tinting* 'high' (12.310). Overall, there may be a tendency towards dissimilation: if the suffix contains a velar nasal (as in *-ang* or *-ong*), the stem-final velar nasal tends to be fronted. If there is no velar in the suffix, stem-final velar nasals may remain unchanged.

3.5.6 Glottal chain reduction

In the Tomini languages with the exception of Taje and Tajio, stem-final glottals are regularly dropped if the suffix also contains a glottal, e.g. TAJ *moN-soyo'-a'o* [monyoyoa'o] 'hide s.th.'. In a few instances, both reduced and non-reduced forms have been recorded, cf. DAM *tatambaa'o* and *tatamba'a'o* 'play'.

3.5.7 L-deletion

Intervocalic laterals are often omitted in most Tomini-Tolitoli languages as already noted in §3.4.2. above. This also holds for base-initial laterals when following a vowel-final prefix (e.g. TIA *mo-lumbusE* and *mo-umbusE* 'hungry'). It does not seem to occur when vowel-initial suffixes are added to an /l/-final base (i.e. no **me-pasi-anE* was recorded next to TIA *me-pasil-anE* 'to spin a top').

3.5.8 Three vowel reduction

When affixation leads to sequences of three identical vowels, these are regularly reduced to two vowel-sequences (TIA *baa* + *-a'a* → *nabaa'a* 'carried (undergoer voice)').

[19] Not enough data have been collected for Balaesang to make a clear-cut statement.

3.5.9 Final vowel deletion

In Lauje, in particular in the East Coast varieties, there is a strong tendency to delete the final vowel in clitics and suffixes in utterance final position. This vowel is invariably /e/ and stress remains on the formerly penultimate, now ultimate syllable. Examples:

(13) limanye/limány 'her/his hand'
noopusome/noopusóm 'finished, ready'
no'ootoi mame/mám 'we (exclusive) know (it/them)'

The stress on the ultimate syllable is distinctly stronger than regular stress on the penultimate syllable.

3.5.10 Reduplication

There are four formal patterns of reduplication in Tomini-Tolitoli languages. In all reduplication patterns it is the (derived or underived) stem, and not the affix, that is reduplicated.

a) *unaccented (C)CV-reduplication* (RDP) as in *mebubulean* 'frighten each other' (< *bule* 'fear'). When a nasal-consonant cluster (NC) occurs stem-initially (often as a result of nasal assimilation, see §3.5.2. above), the reduplicated syllable may or may not begin with an NC-cluster: *mbomboang* 'have a hole' (< *mboang*) vs. *dunduayang* 'swim' (< *nduayang*). This may be part of a more general phenomenon since in utterance-initial position NC-clusters may be realised without the nasal (hence *mbuyo* 'foam' was recorded both as [mbuyo] and as [ßuyo]).

With vowel-initial stems simple monosyllabic reduplication (either accented or not) is not possible. For these stems, RDP2 has to be chosen.

Infixes are inserted into the reduplicated syllable, thus *pinopooto* 'invited' (< *in-RDP-pooto*).

b) *accented (C)CV-reduplication* (RDP1). The reduplicated syllable is distinctly lengthened. Examples:

(14) mensìnsiing < mV-RDP1-nsiing 'rather wet'
menìnimpis < mV-RDP1-nimpis 'rather narrow'

Speakers vary significantly in the degree to which the reduplicated syllable is stressed, making it often difficult to distinguish between RDP and RDP1 (it is possible that the distinction does not (no longer?) exist for some speakers).

In Boano, the distinction between the two types of (C)CV-reduplication tends to be manifested in a somewhat different way: RDP is quite generally realised by the gemination of the stem-initial consonant, e.g. *mettengelan* (*me-RDP-tengel-an*) 'fight each other', while RDP1 is often rendered by simply reduplicating the first syllable without lengthening it, e.g. *mogègelat* [mogegelat] (*mo-RDP1-gelat*) 'shout (continuously/intensively)'. The secondary accent on the reduplicated vowel here (and in the word list) thus does not necessarily indicate lengthening. Instead, in Boano it serves as a marker for the fact that the reduplicated syllable cannot be reduced to a geminate consonant.

c) *(C)(C)V(C)(C)V-reduplication* (RDP2), i.e. reduplication of the first two syllables with deletion of the syllable-final C in case the second syllable of the stem has a coda. Examples:

(15) na-ale-alenda 'rather long'
me-ito-itong 'rather black'
'e-inu-inung 'drink indiscriminately'
lonsi-lonsing 'rather round'
me-ogo-ogob-an 'brood for each other'

Functionally, RDP2 appears to be equivalent to RDP1 since it is most common with vowel-initial stems for which RDP1 is impossible.[20] For CVV(C)-stems both formations are possible and reportedly just variants of each other. Thus both *pàpaila'* and *paipaila'* mean 'quite good'. The functional equivalence is also nicely illustrated by the fact that the contributors often offered RDP1-forms in the more relaxed and reflectional phases of elicitation (when written notes were taken) but then produced a RDP2-form during recording (e.g. *pobàbalu'ang* vs. *pobalubalu'ang* 'store' (11.860), *ngànganting* vs. *ngantinganting* 'earrings' (06.770)).

RDP2 is formally indistinguishable from two other reduplication patterns in the case of bases having the shape (C)CV$_i$V$_i$C or (C)CV(C)CV. In the case of (C)CV$_i$V$_i$C-bases, RDP2 produces phonetically the same result as RDP1. Thus, for example, the form [mbu:mbú:l] (< *mbuul* 'swelling') could be analysed as RDP1 (*mbùmbuul*) or as RDP2 (*mbuumbuul*). In the word lists, these forms have generally been considered to be instances of RDP2.

In the case of bases having the shape (C)CV(C)CV, RDP2 is formally indistinguishable from complete stem reduplication (RDP.F). Thus *'oto'otome* 'already tied up' could be analysed as both *RDP2-'oto-me* or *RDP.F-'oto-me*. The distinction here would rest on functional differences, which remain to be investigated.

d) *full stem reduplication* (RDP.F), i.e. the reduplication of the complete stem as in *mongontongontongE* (< *moN-ontong*) 'watch'.

In the last two reduplication patterns, i.e. those available for vowel-initial stems, it is common to insert a glottal stop in between the reduplicated syllable(s) and the stem-initial vowel. Thus, for example, *mongontongontongE* is pronounced [mongontong'óntonge] and *naalealenda* as [na:le'alénda]. If reduplication leads to a sequence of two identical vowels these may be realised as a single long vowel as when *meogoogoban* is rendered as [meogo:góban]. But pronunciations with a glottal stop, e.g. [meogo'ogóban], also occur.

3.5.11 Notes on individual formatives

This section serves to make explicit some properties of the formatives occurring in the word lists which may not be immediately obvious. Note in particular the first three formatives which are morphologically highly ambiguous in that they occur in a number of clearly different formations.

[20] The fact that RDP2 is most common with vowel-initial in the word lists may, in part, be due to the fact that reduplication has been used as a diagnostic for vowel-initial bases (cf. §3.4.9). For clearly consonant-initial bases, reduplication patterns were not systematically elicited.

me-: Formations involving the prefix *me-* (realis *ne-*) are morphologically ambiguous because the formative *me-* may represent either one of two formations: first, there is a prefix *me-* which occurs in a wide variety of (often intransitive) verbal formations, for example, *me-mansing* 'urinate', *me-tubu* 'live, grow', *me-nggiing* 'cry'. Second, *me-* is a variant of the vowel-harmonic prefix *mV-* when the first vowel of the stem is /i/ or /e/ (as in *me-emisE* 'sweet' or *me-lili* 'yellow'). Consequently, whenever a formation involves *me-* plus a stem where the first vowel is a front vowel, the distinction between the verbal prefix *me-* and the vowel-harmonic prefix *mV-* has to be made on the basis of the meaning of the formation. Since the meaning and uses of these two prefixes have not yet been analysed in detail, the distinction between them has been marked in the word lists only in a very preliminary and incomplete way. Whenever it was not totally clear which formation was involved, *me-* was chosen as the default representation. That is, the prefix *me-* in the word list may represent either of the two formations.

mo-: This formative occurs in three formations: first, *mo-* is a variant of the vowel-harmonic prefix *mV-* when the first vowel of the stem is /u/ or /o/ (as in *mo-tuug* 'dry' or *mo-jolo* 'cold'). Second, there appears to be a simple, not very productive verbal prefix *mo-* as in *mo-se'o* 'choke', *mo-sambaing* 'sneeze', etc. Third, *mo-* is also the regular reflex of *moN-* before nasals, the lateral and the trill. Therefore, a word-form such as *molandas* 'pull' could be analysed as *mo-landas* or as *moN-landas* (the analysis as a vowel-harmonic prefix is excluded because the first vowel of the stem is /a/). Since the difference in meaning and function in particular between *mo-* and *moN-* is far from clear at this point, *mo-* has been chosen as the default representation in all unclear cases.

no-: From an Austronesian comparative perspective, this is a highly unusual formative in that it may mark non-realis mood in undergoer voices as in:

(16) 'Alolongoome **no**beeme unga'e.
'alolong-O-Vme no-bee-Vme unga-'u
rope-O-2.SG.POSS NON.REAL(UG)-give-2.SG.POSS child-1.SG.POSS
'Your rope you will give to my child.'

Thus, the formative *no-* is highly ambiguous in some Tomini-Tolitoli languages since *no-* could also represent the realis form of the vowel-harmonic prefix *mV-*, the realis form of *moN-* before nasals, the lateral and the trill, or the realis form of the verbal prefix *mo-* mentioned above. In its non-realis mood marking function, it occurs in Lauje, Ampibabo-Lauje, Dondo and Tialo. The southern Tomini languages use *ro-* or *ho-* in the same function, while Boano appears to have *o-*. In Totoli, there is no affix for this function (cf. Himmelmann 1996).

M-: This prefix occurs only with /p/-initial words. In non-realis forms the initial /p/ is replaced with /m/, in realis forms with /n/ (e.g. *M-pogabu* → *mogabu* 'will cook', *nogabu* 'cooked'). This formation should not be confused with reduced forms of the prefix *moN-*. For example, the form *momangang* 'chew betelnut' (*moN-pangang*) may be shortened to *mangang*. The fact that *mangang* is not the result of *M-pangang* is shown by the fact that in this case the initial /m/ does not alternate with /n/ in marking modal distinctions (there is no form **nangang*).

-a'a: This suffix is regularly shortened to -á in the Malomba variety of Dondo when word-final (e.g. *bineeá* 'given'). The full form reappears when further suffixes are added (thus *bineea'amo* 'already given').

-ao: The suffix *-ao* in Tanampedagi Taje is often shortened to *-a*, in particular when followed by further suffixes as in *potou-a-mo* 'already finished'.

-in-, ni-, i-, -i-:
All these formatives mark realis mood in the undergoer voices (as in *'ininang-o'u-me pensa'-onye* 'I ate her bananas'). In some languages, their distribution is strictly phonologically conditioned (in Lauje, for example, *i-* occurs before laterals and *-in-* elsewhere). In other languages, however, other factors appear to be involved as well. Totoli contributors, for example, claimed that *ni-* and *-in-* are freely interchangeable for consonant-initial stems (in the word list, only those formatives are listed which have actually been used with the item in question). Similarly, the Ampibabo-Lauje contributors in Ampibabo said that *i-* and *ni-* can be freely interchanged. Note that in the Sidole variety of Ampibabo-Lauje *i-* is the regular marker for undergoer realis mood. The formative *-i-* was encountered only in a few places, most importantly in the Gio variety of Dondo (e.g. *b-i-alatu'* 'thrown at') and some of the northern Pendau varieties. The combination of an undergoer realis mood affix with the applicative suffix *-i* (*ni--i*, *i--i*, etc.) should be regarded with considerable caution. While such formations have been volunteered with some frequency by Southern Tomini speakers (Balaesang and Tajio, in particular), its occurrence in the northern Tomini and Tolitoli data is very sporadic and may simply be due to interference from Indonesian, where *di--i* is a regular affix combination for passive applicatives. Note also that all such combinations found in the Ampibabo-Lauje data were only accepted by one speaker, with the exception of the word *ni-ulis-i* 'peeled', which was used by three different speakers.

3.6 A note on NP-markers

This section briefly introduces a few proclitic NP-markers which occasionally show up in the word lists.

The Tomini languages make use of proclitic NP-markers to indicate basic syntactic functions. Furthermore, all Tomini-Tolitoli languages have a proclitic marking personal names (either *si* or *i*). The details have not yet been investigated for all of the languages, but most of them appear to have a system similar to the one found in Lauje. Table 2 lists the Lauje forms (see also Himmelmann, in press b). Optional markers appear in parentheses.

Table 2: NP-markers in Lauje

	COMMON NOUN	PERSONAL NAMES
ARTICLE	(nu_1)	si
GEN	nu_2	ni
LOC	li	-

The two markers of the shape *nu* differ on a purely morphological level.[21] Genitive *nu*, which is used to mark the actor in undergoer-oriented constructions and the possessor in possessive constructions, is regularly reduced to *u* after consonant-final words, as in:

(17) li lalong **u** ogo
li lalong nu ogo
LOC inside GEN water
'in the water'

Similarly, the genitive marker *ni* for personal names is reduced to *i* after consonant-final words.

No such regular alternation occurs with article-like *nu*. Furthermore, there is a special emphatic form *'onu* for article-like *nu* which is found most commonly in clause-initial position:[22]

(18) **'Onu** bangkola' pogombo'onya nu tatambuang E
'onu bangkola' po -gombo'-O-nye:A nu tatambuang E
DET monkey GER-word-O-3.SG.POSS:A DET bee E
'As for the monkeys, they talked to the bees.'

No such emphatic form exists for genitive *nu*.

As shown by the preceding example, article-like *nu* may be used to mark subjects (and topicalised constituents). This use of article-like *nu* is optional.[23] It may also occur with undergoers in actor-oriented constructions, as in:

(19) Tuái'e nonobong E **nu** kopi.
tuai-'u noN-tobong E nu kopi
younger_sibling-1.SG.POSS REAL.AV-cut E DET coffee
'My younger sibling chopped down the coffee tree (that I had planted).'

Again, this usage is optional and, in fact, rather infrequent in spontaneous discourse.

With some exceptions, the same markers also appear to occur in the other Tomini languages. In Totoli and Boano, however, common nouns in core argument function remain generally unmarked (personal names are marked with *i* in all syntactic functions). In Tajio, common nouns in core argument function are generally preceded by the proclitic *te* (occasionally also pronounced as [ti]). The precise usage of this element in coherent discourse needs further investigation. Very preliminary inspection suggests that it is used like a specific article. That is, it occurs in most referential nominal expressions, whether or not they are definite (i.e. identifiable for the hearer). The factors determining its use in elicitation are also not clear. Some speakers used it almost all of the time, others only rarely. Across

[21] The following account is simplified in that it ignores several variations which occur in spontaneous discourse and often render the two markers indistinguishable. See Yoshimura (forthcoming) for a detailed account of essentially the same phenomenon in Tialo, Lauje's northern neighbour.

[22] Recall that capital A also represents a paragogic vowel (for further information on A, see Himmelmann 1997).

[23] The fact that article-like *nu* is optional is the major reason for calling it 'article-like' rather than an article. The compiler takes it as a defining characteristic of definite and specific articles that they have to be used whenever a nominal expression is definite or specific. The overall distribution of article-like *nu* is very patchy, with some speakers using it fairly consistently for marking subjects, but others hardly using it at all.

speakers there was a tendency to use it with vowel-initial words. In the word list, use of this proclitic during recording is indicated by writing *te=* after the main entry.

In Ampibabo, the article-like common noun marker is *u* rather than *nu*. In the variety of Ampibabo recorded in the village of Ampibabo, this marker consistently occurred before vowel-initial words. Before back vowels it is generally articulated as a semivowel (e.g. *u=ogo* [wógo] 'water'). Before front vowels it is often clearly vocalic (cf. *u=eleo* [ueléo] 'day'). In the word list, use of this proclitic during recording is indicated by writing *u=* after the main entry.[24]

Finally, note that there is also some variation with regard to the form of the general locative preposition (*li* in Lauje), as documented in entry 12.000 in the word list.

3.7 How to read an entry: some examples

Although most entries are fairly straightforward to read, some entries may appear quite complex on first sight. This section includes a few examples of how to read such entries.

The Dampelas entry for No. 04.780 'bury, inter' reads *tanong moN%t-, DMB: mencoyo' =12.270, lobong 'kubur'*. The formative *moN%t-* represents the form *montanong* 'to bury', where a stem-initial voiceless plosive is *not* replaced by the homorganic nasal N (as indicated by *%t*). The Dampal word for 'bury', as recorded in Bangkir (DMB), is *mencoyo'*, which also means 'hide' (=12.270). Finally, when eliciting this entry, the contributors also mentioned the word *lobong* for 'grave' (Indonesian *kubur*). Note that *lobong* does not mean 'bury, inter' in spite of the fact that it is included in this entry.

The Lauje entry for No. 12.250 'close' reads *taub -a'* [táuba'] *moN-~ -in--ang~ RDP1~ 'tertutup', +07.270*. Of the four formations volunteered by the contributors for this base, only one, the one with the suffix *-a'*, was recorded (all other formatives are followed by a raised tilde). The form *tauba'* is stressed on the antepenultimate syllable as shown within the phonetic brackets. The reduplicated form *tàtaub*, with lengthening of the reduplicated syllable (RDP1), means 'happen to be closed, closed by accident' (Indonesian *tertutup*). The meaning 'close' can also be rendered with forms derived from the base *bombong* 'wall' which is found in entry No. 07.270. This is indicated by +07.270 preceded by a comma.

The Dondo entry for No. 04.201 'temple' reads *gigisingan /E +DLU +BBA~ +SLG~ OYM: gisinganE BGI: gigising~*. */E* indicates that the base form for this entry was recorded both with and without a paragogic vowel. The same form for this item was also given by the contributors in Dulu (+DLU), Bonto' Buaya (+BBA) and Salugan (+SLG). In the latter two locations, no tape recording was made of this form, as shown by the raised tilde. In Oyom, the word for 'temple' is *gisinganE* (*OYM: gisinganE*), and in Boangin it is *gigising* (*BGI: gigising~*).

The Dampelas entry for No. 04.853 'swell (like an abscess)' reads *sumombor mV- (sakit), mangka' A -amo mV- (beras) +DMB*. The first item here, *sumombor*, is specific to swellings related to illness, as indicated by *(sakit)*. The second item, *mangka'*, is used for other kinds of swelling, including the swelling of rice (*beras*). This item was also elicited from a Dampal speaker in Bangkir (*+DMB*). Obviously, *mangka'* does not mean 'swell like an abscess'. That is, *like an abscess* is part of the elicited concept, i.e. the concept specifically asked for in this entry. The Tomini-Tolitoli items included in the entry do not necessarily render this concept precisely. In this sense, the glosses accompanying each entry, and in particular the English ones, are possibly misleading and should be treated with great care.

[24] Article-like *nu* occurred only very sporadically when eliciting lexical items in the other Tomini-Tolitoli languages.

3.8 Comments on semantic fields (problems in elicitation, 'negative' responses, etc.)

This section presents elicited items which are better presented in the form of tables than in the standard list format, including pronouns, deictics, and numerals. In addition, some of the recurrent problems encountered during the elicitation of the word list are discussed. This includes the discussion of those items which were included in the original fieldwork list, but for which no term in the Tomini-Tolitoli languages could be found and which, therefore, are not listed here. Note, however, that a substantial number of entries for which only paraphrases or obvious loans could be elicited are still included here, because paraphrases and loans provide important information with regard to the structure and the history of these languages. The discussion is organised along the twenty two semantic fields distinguished in the CADW.

3.8.1 Physical world in its larger aspects

Some of the distinctions provided for in the word list do not seem to be conventionally made in the Tomini-Tolitoli languages. For example, the elicitation of 'hill' and 'summit' in addition to 'mountain' (01.220ff), of 'plain' (01.230) and 'valley' (01.240), of 'reef' and 'sandbank' in addition to 'island' (01.250ff), and of 'rain cloud' as distinct from 'cloud' (01.730f) generally involved lengthy discussion and word searches.

The following concepts proved to be virtually unknown and often elicited some kind of paraphrase: 'isthmus' (01.258), 'cave' (01.280 - as distinct from 'hole'), 'surf, rough (of sea)' (01.323), 'tide, hightide' and 'lowtide, ebb' (01.352f), 'waterfall' (01.390), 'light' (01.610), and 'fog' (01.740). In the case of 'fog' and 'isthmus', the Indonesian expressions, *kabut* and *genting tanah*, appear to be unknown in the area. The Indonesian word *kapur* 'lime' (01.445) was also not familiar to most contributors, but the concept was easily identified with reference to betelnut chewing.

Eliciting the Indonesian word *hutan* 'woods, forest' caused some problems since there seems to be no exact equivalent in the Tomini-Tolitoli languages (cf. 01.410ff). Usually a distinction was made between 'jungle', i.e. rainforest that has never been penetrated (01.412), and 'bushland' (01.413), an area which is also difficult to penetrate, but distinct from 'jungle' because of the absence of high trees. The word for 'bushland' was generally felt to be the closest equivalent to *hutan*.

For unknown reasons, the word for 'bay' (01.340) in Boano was the object of an intensive discussion and word search. Both words eventually offered, i.e. *loyok* and *lembok*, were claimed to also mean 'valley' (01.240).

3.8.2 Mankind: sex, age, family relationship

3.8.2.1 Kinship terms

Kinship terminology appears to be not very elaborate. A check was done for all the distinctions in the Holle list (see Holle 255-318), but most of the more delicate distinctions

were claimed not to be expressed in the Tomini-Tolitoli languages. Even distinctions which do occur in other Sulawesi languages and which are provided for in the SUW are not made:

- for parents' siblings ('uncle' and 'aunt') no distinction between mother's sibling and father's sibling is made (SUW 89-92). As for age distinctions among parents' siblings, only in Dondo and Totoli a distinction between 'small uncle/aunt' and 'big uncle/aunt' was mentioned (cf. 02.514/5 and 02.524/5), but these concepts are analytically expressed.
- a sex-based distinction between siblings (brother vs. sister, SUW 85-88) is not made. The translations offered here by some contributors meant 'male sibling' and 'female sibling', quite obviously following closely Indonesian *saudara laki-laki* and *saudara perempuan*. Dampelas contributors claimed that *logas* in Dampelas is used by female siblings as a term of address for male siblings (the cognate in other Tomini-Tolitoli languages means 'young man', cf. 02.251), while *bibine* is used by males for female siblings (the cognate in other Tomini-Tolitoli languages means 'woman', cf. 02.220).
- with the exception of Balaesang, no lexical distinction exists between 'husband' and 'wife' (SUW 72,73); only a general term meaning 'spouse' is used.
- as for in-law relations, some of the Indonesian words used in elicitation, in particular *besan* (02.602) and *biras* (02.652), were generally not known and created considerable confusion. Only a few contributors offered a form for *besan* which may be due to the fact that the compiler was not successful in communicating the intended concept. Becky Quick (pers.comm.) reports that the Pendau term *besan* is *poposialap*. With regard to *biras*, an 'improper' elicitation method was occasionally used in the later stages of the fieldwork in that the contributors were asked for a cognate of *lago*.

The call forms for 'uncle' (02.511) and 'aunt' (02.521) are used generally in addressing older people. One of these terms, *mangge* 'uncle', is considered to be a Kaili word and is also widely used in the local variety of Indonesian as a somewhat colloquial, but still polite term of address for older males (both for ones known and unknown to the speaker).

The call forms for 'boy' (02.253) and 'girl' (02.263) are used primarily for very young children up to the age of about five years.

The distinctions made in the Holle List (407-409) between 'take a husband', 'take a wife', 'give in marriage' are not lexically expressed. Instead, different affixes are attached to the bases given in 02.330.

The words for 'man, male' and 'woman, female' listed in 02.210 and 02.220 apply to humans as well as animals (i.e. Indonesian *jantan* and *betina* were rendered with the same Tomini-Tolitoli words as Indonesian *laki-laki* and *perempuan*).

3.8.2.2 Personal pronouns

Table 3: Personal pronouns[25]

	1.SG	2.SG	3.SG	1.PL.IN	1.PL.EX	2.PL	3.PL
BAL	sau	soo	sia[26]	ita	sami	miu	samono
DAM	hia'u/ha'u DMB: sia'u	hi'oo DMB: si'oo	sia	'ita DMB: si'ita	'ami/hi'ami DMB: si'ami	hi'emu/'emu DMB: si'ita	taisia[27]
PEN	ha'u/a'u STD: ia'u/a'u +BGI +KNI	'oo BGI: i'oo +KNI	io	'ito	'ami	'emu KNI: 'oo seinsang	jimo
TJP	a'u/au	si'oo	ia	'ita	'ami	miu/'emiu	jimo
TTA	siau/sau/au	sioo/soo	siia/ia	siita SGA: ita	siami	simiu	jimo/jimia
TAJ	sia'u	sioo MLI: si'oo	sia MLI: siia	siita	siami MLI: si'ami	simiu	sisia MLI: siira
AMP	sia'u TPD: siau	'oi/si'oi TPD: sioi SDL: si'o'i	siio/io	'ito/si'ito	'ami/si'ami TPD: siami	si'emi/'emi TPD: siemi	sijimo[28] SDL: u=jimo TPD: jimo
LAU	lia'e/liá' SBG: lia'u	li'ó/li'oe BBG: li'oo +IPG +SBG	liio	li'ite	li'ame SBG: li'á	li'eme	lijimo/jimo
TIA	ia'u/ya'u	'oo/i'oo	io	'ito	'ami	'emiu	jimotE
DON	ia'u GIO: ya'u +DLU +OYM +BBA	i'oo/oo/yoo	io SLG: liio +OYM	ito	i'ami/ami/ yami	emiu	jimotE
TOL	aku/yaku	kau	isia	kita	kami	kamú	sisia
BOA	yaku'	cau	sia/isia	kita'	kami'	komú	seena

As shown by Table 3, in addition to the bare pronoun stem a variant occurs in many languages in which a proclitic personal article is added to the stem. In those instances where both forms are included in Table 3, they were both offered in elicitation. In those instances in which only a procliticised form is given (cf. in particular the Dampelas, Tajio and Lauje

[25] Unless otherwise noted, the same formatives have been recorded in all locations visited for a given language (see §3.2 for details). An abbreviation for a village name preceded by a plus sign (e.g. +BGI) indicates that the form preceding it was recorded in that village as well. This convention holds for all the remaining tables in this chapter.

[26] This pronoun, as well as the two first person plural forms in Balaesang, have also been recorded with a final glottal stop, i.e. as [sia'], [itá'], and [sami'], respectively.

[27] The variant *toisia* can also be heard.

[28] One older contributor offered *jimot* as a variant for *sijimo*.

series), this form appears to be the standard form (among other things, it was the only form being offered in elicitation). This does not mean that the proclitic cannot be dropped at all. However, some forms, in particular the first person singular and, to a lesser extent, the third person singular forms, appear to be particularly resistant to dropping the proclitic. For example, in the Lauje and Dampelas texts examined so far, the first person is always expressed by the procliticised form. For Ampibabo-Lauje is was claimed that *si=* cannot be dropped in the first person singular.

In Tialo and Dondo, all forms except the first person singular, the *i'oo* variant of the second person singular and the *i'ami* variant of the first person plural exclusive may be preceded by proclitic *li=*, which, however, was very rarely used in the elicited data.

The plurality of the second person plural forms may be enforced by the word for 'all'. Thus we find DAM *'emu seséibi*, TAJ *simiu jijoo*, DON *emiu joojoo*, TOL *kamú ssaakan*, BOA *komú siddana*. However, these expressions may simply be modelled on Indonesian *kamu sekalian*, which was sometimes used in eliciting second person plural forms.

The second person plural forms in Totoli and Boano, as well as a few variants in the Lauje paradigm, contain a final vowel which is distinctly stressed. One could probably analyse and represent this vowel as a long vowel, but although it is occasionally realised as a long vowel, the acoustic impression overall is that of a strongly stressed short vowel.

In the pronominal forms, palatal glide epenthesis between a front high vowel and a back vowel is very common. Thus DAM *hia'u* is usually pronounced [hiya'u], DON *ia'u* [iya'u], DON *io* [iyo], DAM *sia* [siya], TAJ *siami* [siyami]. If the front vowel is unstressed and word-initial, it is generally realised as a palatal glide, thus DON *ia'u* is usually rendered as [ya'u]. In Totoli and Boano this is always the case for the first person singular which is therefore orthographically represented as <yaku>.

The first person plural exclusive pronoun is sometimes used as a polite form for the first person singular, examples having been recorded for DON (*i'ami*) and TOL (*kami*). Even more polite (but only used in very formal speech styles such as when proposing a marriage) is the use of DON *botuan ní*, TOL *botuon ia* 'this slave' in reference to the speaker.

As a polite term of address, the second person plural (e.g. TOL *kamú*, BOA *komú*) may be used, but the first person plural inclusive (AMP *'ito/si'ito*, DAM *'ita*, TOL *kita*, BOA *kita'*) is perhaps even more common in this function. Note that in the variant of Indonesian used in the Tomini-Tolitoli area the first person plural inclusive *kita* has 3 uses: 1. as a term for the first person plural inclusive (often enforced as *kita dua*); 2. as a term of polite address; 3. as a polite term for the first person singular or first person plural *exclusive* (often disambiguated as *kita ini*).

3.8.2.3 Possessive pronouns

Table 4: Possessive pronouns

	1.SG	2.SG	3.SG	1.PL.IN	1.PL.EX	2.PL	3.PL
BAL	-u	-mu	-na	-ta	sami	miu	samono
DAM	-'u	-mu	-nya, sia	'ita, -ta DMB: ni 'ita	'ami DMB: ni 'ami	'emu DMB: ni 'emu	taisia DMB: ncia
PEN	-'u	-mu	-nyo	-to	mami	miu	ni jimo
TJP	-'u	-mu	-nya	-ta	mami	miu	jimo
TTA	-u SGA: -'u	-mu	-nya	-ta	niami	(ni) miu	ni jimo
TAJ	-'u, ni a'u	-mu	-nya	niita[29]	niami MLI: ni'ami	nimiu	ninia MLI: niira[30]
AMP	-'u	-Vme[31]	-nyo	-to	mami	miu	nu jimo
LAU	-'e	-Vme	-nye	-te KAL: li'ite	mame	mie	nu jimo
TIA	-'u	-Vme	-nyo	-to	mami	miu	nu jimotE
DON	-'u/-u	-Vme	-nyo	-to	'ami/ami	miu	nu/ni jimotE
TOL	-ku	-mu	-na	-ta	kami	kamú	sisia
BOA	-ku	-mu	-na	-ta'	kami'	komú	seena

As with free pronouns, the first person plural exclusive forms may be used in polite self-reference while the first person plural inclusive and second person plural forms are used as polite terms of address.

The possessive pronouns are a heterogeneous set to the extent that there are three formal possibilities:

- possessive *suffixes* (for all singular forms and the first person plural inclusive).[32]
- *enclitic* forms, i.e. forms which differ from the free forms and only occur in possessive function, but are not suffixes (first person plural exclusive and second person plural in Pendau, Taje (Petapa), Ampibabo-Lauje, Lauje and Tialo).
- forms identical to the free personal pronouns, either simply juxtaposed to the possessum or with a noun phrase-marking proclitic (*ni* or *nu*, see §3.6) inserted between possessum and 'possessive' pronoun.

The difference between suffixes and clitics/free forms is evident in stress assignment. Suffixed forms receive regular penultimate stress, i.e. the suffixes (all but one of which are

[29] Also recorded as [nita].

[30] Recorded as [nira].

[31] The formative *-Vme* is realised as follows: With a vowel-final stem, the final vowel is lengthened (cf. LAU *tuaiime* 'your (SG.) younger sibling' < *tuai*), with consonant-final stems /V/ is realised as /oo/ (cf. LAU *labongoome* 'your (SG.) house' < *labong*).

[32] But note the first person forms in Tajio and the variation in Dampelas, where the free forms of the pronoun may also be used for third person singular and first person plural inclusive.

monosyllables) cause the stress to move to the final syllable of the stem, while no such shift is triggered by clitics and free forms. Compare LAU *tuaí'e* 'my younger sibling' (stem *tuai*) with *tuái mame*[33] 'our (exclusive) younger sibling'.[34] In the northern Tomini languages, and in Dampelas and Pendau, clitics and suffixes are further distinguished by O-epenthesis (cf. §3.5.3 above): /o/ is only inserted in between a consonant-final stem and a pronominal suffix, as in LAU *labong-o-'e* 'my house' (stem *labong*). With clitics or free forms, no O-epenthesis occurs.[35]

Free forms and clitics are distinguished by the fact that only the former may occur independently, i.e. without a preceding noun.

When the /m/-initial clitics *mami* and *miu* occur after a consonant-final stem, two variants have been recorded in the northern Tomini languages: either a paragogic vowel is used in between clitic and stem (as in TIA *labong E mami* 'our (incl.) house'), or the initial /m/ of the clitic is dropped (as in TIA *labong ami* 'our (incl.) house'). Similarly, the initial nasal of the noun phrase markers *ni* and *nu* is regularly dropped in these and some of the southern Tomini languages (see §3.6).

In Lauje, the final vowel of all suffixes (and enclitics) may be dropped without shifting the stress, leading to forms such as *labongó'* 'my house', *labongoom* 'your (SG) house', and *labongóny* 'his/her house'. Furthermore, the first person suffix *-'e* becomes *-'u*, and third person singular *-nye* and first person inclusive *-te* become *-nyo* and *-to*, respectively, when further suffixes are added. Thus adding the completive marker *-me* to *labongo'e* 'my house' results in *labongo'ume* (or its shortened variant *labongo'úm*), cf. also *labong-o-nyo-me*.

3.8.3 Animals

No native term for 'animal' exists. The contributors claimed that they generally used Indonesian *binatang* to express this concept. Occasionally, they also offered *olokolo*, but said that this was a Bugis word. The Totoli contributors mentioned *eang* (Indonesian *hewan*) 'domesticated animal' as the term closest to this concept.

There are no rabbits, bears, and half-apes (Indonesian *pukang*) in the area, and the contributors were generally unfamiliar with these concepts. There are also no crocodiles, but at least the concept was known and expressible with an Indonesian loan (03.970). Horses, cows, and sheep are not very common and have probably been introduced only recently. Goats are much more common and provide the standard meat dish for festivities of the coastal population. For the Muslim part of the population wild pigs are a great nuisance since they

[33] In fact, this phrase seems to allow for two differing stress options: Stress may occur on the possessum ([tuái mame]) or on the possessor ([tuai máme]). These options, however, need further testing and clarification.

[34] In Boano, a few words with possessive suffixes have been recorded in which stress clearly occurs on the antepenultimate syllable, e.g. *báeku* 'my house' (rather than *baéku*), *báena* 'his/her house', etc.

[35] Note that the distinction between possessive suffixes and possessive clitics proposed here is a preliminary and probably also an overly general one. For some of the languages, it may be more useful to draw the line between suffixes and clitics somewhat differently. Specifically, it can be argued that stress provides evidence for phonological words rather than morphosyntactic words and that O-epenthesis is characteristic for clitics rather than for suffixes. Suffixes would then be defined by the fact that they trigger velar fronting (see §3.5.5 above), which, however, does not occur in all Tomini-Tolitoli languages. In this analysis, all forms considered possessive *suffixes* here would have to be analysed as possessive *clitics*. That is, in fact, the analysis adopted for Pendau in Quick (forthcoming).

may destroy gardens, but any kind of contact with them is avoided for religious reasons. The main protection used against pigs is strong fencing.

The elicitation of many expressions for animals was hampered by the fact that the Indonesian expressions were unknown to the contributors and that the compiler lacked the expertise to provide for adequate descriptions and/or the opportunities for pointing out live specimens. Completely unknown was, for example, the Indonesian word *lipas* for 'cockroach' (03.814). Unfortunately, the compiler learned just at the very end of his second stay that the commonly used terms are *kacoa* or *kakerlak*. Other problematic items include:

- The Indonesian terms *burung nuri* 'parrot' (03.594) and *burung bayan* 'parakeet' were not known. What was elicited here then was a wide variety of terms for usually colourful birds (cf. 03.598). The preferred Indonesian gloss for all kinds of these birds appeared to be *kakatua* 'cockatoo' (03.595).
- There appears to be no generic term for 'shell'. Hence, this entry (03.655) contains a collection of terms for kinds of shells.
- No distinction is made between *lebah* 'bee' (03.820) and *penyengat* 'wasp' (03.823). Items elicited on the basis of the latter term are often based on the base for 'bite, sting', following the Indonesian model.
- *ular sawa* 'python' (03.852) was often heard as *ular sawah* 'snake in rice field' due to the fact that there is no final /h/ in the local variety of Indonesian.
- *kumbang* 'beetle' (03.880) was occasionally a problem because some contributors didn't know the Indonesian term.
- *tonggeret* 'cicada' (03.890) was generally elicited on the basis of an attempt to imitate its sound, and it is almost certain that this procedure did not always produce satisfactory results (i.e. it is very likely that not all items listed in this entry mean 'cicada'). The discussion in general involved at least two different items, one of which was claimed to render Indonesian *jangkrik* 'cricket' (03.892). For the Tomini-Tolitoli contributors, the main difference between the two concepts consists in the fact that the animal termed 'cricket' can be heard at midday, while the 'cicada' is active in the evening.
- The words elicited for *katak puru* 'toad' (03.952) mostly mean something like 'big frog'.

3.8.4 Parts of the body; bodily functions and conditions

No distinction is made between 'leg' and 'foot' (04.350). The entries for different parts of the arm (04.313f) are also of doubtful validity. A three-way distinction between upper arm, forearm and hand is uncommon. The most common distinction, if there is one at all, is between upper arm and forearm (including hand), thus a more precise gloss for 04.310 'arm' would be 'arm/upper arm'. Similarly, 04.330 'hand' could be glossed as 'forearm/hand'.

There is also no distinction between 'finger' and 'toe' (as with Indonesian *jari*). The word for 'thumb' generally refers also to the big toe. The words for the index, middle and ring fingers are only rarely used, as explicitly noted by many contributors and witnessed by their complex morphological make-up. The ring finger of the left hand is traditionally used for the evacuation of the bowels of a deceased person.

The item elicited in No. 04.374 originally was 'footprint' (*bekas kaki*). This concept, however, is analytically expressed by combining the word for 'scar, trace, print' (cf. also 04.855) with the word for 'leg/foot'.

The words for 'wrist', 'ankle' and 'joint' (04.321, 04.371, 04.376ff) caused a considerable amount of confusion and should be regarded with caution. The confusion pertained to the distinction between the visible bony part of the joint and the 'invisible' joining function. The words for 'joint' generally refer to any kind of joint (including joints in tools and machines next to bodyparts). If there are two words for 'joint', the difference pertains to the size of the joint. 'Wrist' is only rarely lexicalised.

It is doubtful whether the words elicited for 'claw' (04.345), which was always accompanied by lengthy discussions, specifically refer to the body part. They seem generally to denote the action of scratching as can be gleaned from the fact that in part the same items were offered for 'scratch (an itch)' (04.858). In discussing 'claw', it was also not uncommon to mention the items for 'paddle' (10.852) some of which mean 'dig' (08.220) as well.

There is no distinction between 'vein', 'sinew', and 'nerve', all of which are expressed by a cognate of Indonesian *urat* (04.155).

Most of the words for internal organs were very difficult to obtain. Only 'liver' (04.450) and 'gall' (04.454) were readily understood, probably because they play a role in the traditional healing ceremonies that are still practiced. 'Gall', furthermore, is well known because of its bitter taste and is usually not eaten. All the other internal organs seem not to be highly differentiated and often subsumed under the word for 'intestines' (04.461). This word, however, mainly refers to the long and narrow-winded intestines, in several cases including the stomach (04.460). In many languages there is in fact no special word for 'stomach' as opposed to 'belly' (04.435). 'Heart' (04.440 Indonesian *jantung*) was often understood as synonymous with 'liver' (Indonesian *hati*). Some contributors seemed not to understand explanations of the concept in terms of the heartbeat and/or the pumping function. The same can be said for the 'lungs' (04.441) as the place of breathing. The Indonesian words for 'kidney' (*buah pinggang* or *ginjal* (04.451)) and 'spleen' (*limpa* (04.452)) were generally unknown. As for 'kidney', sometimes a hint to their approximate location as well as to the fact that they come in pairs was helpful. Both 'kidney' and 'spleen' were elicited in later stages by offering cognates from other languages.

The concepts of 'waist' (04.462) and 'hip' (04.463) appear not to be known in the area. The items elicited for 'waist' probably refer to the complete flank of the trunk from hip to armpit. As for the items for 'hip', it is not clear whether and how 'buttocks' (04.464) and 'hip' are distinguished.

The Indonesian words used in the field list for 'snore' (04.612) and 'belch' (04.523), i.e. *dengkur* and *serdawa*, are not known in central Sulawesi (and also in northern Sulawesi, as ascertained during a brief stay there in 1996), but the concepts could easily be elicited by performing the actions.

The entries for 'nod' (04.628) also mean 'to agree/say yes by nodding', as in English.

Despite their apparent similarity, the terms for 'die' and 'kill' (04.750-60) involve clearly different lexemes. The penultimate vowel in *maate* 'die, dead' is always long (except in Lauje, where the short vowel in *mate* has been checked several times), while the penultimate vowel in *pate* 'kill' and its derivatives are always clearly short. Some of the items elicited for 'death' (04.753) are derived from the base form for 'die', others from the one for 'kill'. It is likely that the contributors here simply offered a form they considered similar to the Indonesian formation *kematian*.

See also §3.8.13.2 for the use of body part terms in expressing length and height measures.

3.8.5 Food and drink; cooking and utensils

A large number of the items for cooking utensils (05.260-05.390) were clearly felt to be loans (obvious exceptions include the items for 'bamboo water container' (05.345ff) and spoons and ladles (05.370ff)). Most of these instruments appear to have been introduced to the area only fairly recently (within the last one hundred years?). Note that in general no distinction is made with regard to the material the utensils are made from (iron, earthenware, etc., cf. Holle Nos. 492ff).

The items for 'breakfast' (05.420) almost always involved lengthy discussions. It is probably not a native concept. All kinds of meals are usually referred to by the word for 'eat' (05.110).

In entry 05.215 'cook in bamboo container (sticky rice)', the items cognate to Totoli *sinosok* primarily refer to 'sticky rice' while the other items more generally refer to the preparation of food in a bamboo container.

The term 'pepper' (*lada*) as opposed to 'chili' (05.820) is largely unknown in the area.

3.8.6 Clothing; personal adornment and care

Weaving (06.330ff) appears not to have been a traditional occupation. There was no contributor (male or female)[36] who had a full command of the terminology. In various places it was claimed that weaving was only common during the time of the Japanese occupation (i.e. it was not common *before* or after that time), partially because no other clothing was available, and partially because it was enforced by the Japanese. If that were true, however, it would be surprising how many people still know the basic terms, given the fact that the occupation lasted only two to three years. It seems more realistic to assume that weaving was introduced to the coastal population by the Kaili, but at no time was very widespread and has been given up in the last 30-40 years. During the compiler's stay, nowhere was a loom evident. Note that there is a productive weaving industry in the Kaili area (Kecamatan Tawaeli is its center) which produces the Donggala silk sarongs which are famous at least in Sulawesi and neighbouring islands.

No generic terms for 'bag' and 'box' seem to exist while a number of items was offered for more specific kinds of bags and boxes (06.650ff). For unknown reasons, the word for 'beads' (06.760) was often a problem in elicitation, in particular in Boano.

3.8.7 Dwelling, house, furniture

For floors (07.260), walls (07.270), and roofs (07.510) no difference is expressed with regard to the material they are made of (cf. Holle 439ff., 456ff.). As for roofs, there are only

[36] A conscious effort was made to have women present when discussing this topic.

two kinds of roofing found these days: thatch made from palm leaves (usually bought already prefabricated) or corrugated iron.

Problematic items in this group include the following:

- *loteng* 'attic' (07.125) and *para-para* 'storage shelf above hearth' (07.126) were often difficult to elicit. Most contributors were unfamiliar with Indonesian *para-para*.
- *kamar* 'room' (07.210) was widely claimed not to be a native concept.
- words for 'kitchen' (07.310) were almost always offered with some reluctance. This may be due to the fact that the word for 'kitchen' is generally the same as the word for 'ashes' (01.840).
- blankets (7.423) are not commonly used in addition to sarongs. Thus, the words elicited here all appear to have some other, or at least wider, meaning than simply 'blanket' (possibly 'cover').
- *runtuh* 'collapse (house)' (07.700f): This concept, which was not on the original field list, was typically mentioned in connection with the attempt to elicit responses to *merobohkan (rumah)* 'pull down (house)' (Holle 491, 07.705), an item which almost always caused some confusion. One typical response for the latter was the word for 'destroy' (11.270). In addition, various words for intransitive 'collapse' were offered. For these, the direction of the collapse, i.e. downwards or to the side, seems to be important.

3.8.8 Agriculture, vegetation

The terms for wet rice fields and their parts (08.121f) were felt to be loans from South Sulawesi languages, probably reflecting the fact that wet rice cultivation is a relatively recent innovation in the area. The distinction made in the Holle list (Holle 0542/43) between a rice plant in the field and one that has already been harvested is not made, rice plants always being referred to with the items listed in 08.480. The Indonesian word *bulir* 'ear of rice/corn' (08.485) was unknown and it is unclear whether the compiler was successful in communicating the concept.

As for *kebun/ladang* 'garden, dry rice/corn field' (08.130) note that the original field list (following Holle 653/655) contained two separate entries: *kebun* and *ladang*. *Ladang* was elicited in connection with *sawah* '(wet) rice field'. But *kebun* and *ladang* were consistently rendered with the same word in the Tomini-Tolitoli languages.

With regard to the fauna part of the field list, only a few items were claimed to be unknown in the area, in particular *lalang* 'kunai grass (imperata cylindria)' (Holle 772) (but see 08.515) and *pohon cempedak* 'breadfruit (tree/fruit)' (Holle 694; Totoli contributors mentioned *kulug* as a possible translation). Furthermore, *nila* 'indigo' (08.859) may also belong to the items which actually do not occur in the area (the Indonesian word *nila* was not known).

As usual in many parts of Southeast Asia, the same word is used to denote a kind of tree and its fruit (e.g. Indonesian *durian* denotes both the durian tree and the durian fruit).

For coconuts (08.820ff), and to a lesser extent also for bananas (08.840ff) and mangos (08.870ff), the contributors spontaneously offered terms for different stages in the ripening process. Most of these terms have been included in the list despite the fact that their meaning could not always be delimited precisely. Furthermore, these terms are often not specific to these fruits but refer to general characteristics such as 'being dry', 'making noise', etc.

Indonesian *sulur* for 'liana' (08.858) was unknown and it proved difficult to explain the concept.

For a number of entries, including for example *jambu* 'eugenia' (08.892ff), *labu* 'pumpkin' (08.930f), and *cendawan* 'mushroom' (08.980f), no generic term exists. More often than not, the various subspecies mentioned here could not be properly identified. It is thus likely that these entries are heterogeneous in that they contain names for different species.

3.8.9 Miscellaneous physical acts and those pertaining to arts and crafts, with some implements, materials and products

The terminology for cutting instruments (09.230ff) is not very elaborate. The words listed for 'machete' (09.232) can usually be used for all kinds of knives, swords etc. Not a single item could be elicited as a translation for 'knife for cutting grass' (Holle 0649).

The entry 09.280 ('tear') contains the first item volunteered when asked to give an equivalent to Indonesian *menyobek* or *merobek*. After volunteering this item, many contributors remarked upon the fact that there are other words for different kinds of tearing. These words are listed in the entries 09.281f, accompanied by some very tentative indication as to their more specific meanings.

Indonesian *tukang* 'craftsmen' (09.410) generally elicited a word corresponding to Indonesian *pandai* 'smart', usually preceded by nominalising *to*.

3.8.10 Motion; locomotion, transportation, navigation

To elicit 'drop s.th.' the Indonesian *menjatuhkan* was used. The responses without exception follow the Indonesian model, involving the base for 'fall' (10.230) plus the relevant affixes. As for 'fall', some contributors spontaneously offered a range of additional items (10.230ff) for various kinds of falling, mostly distinguished by a characteristic sound. Most of these items are felt to be onomatopoetic.

The items in the entry for 'catch' (10.252) were elicited together with 'throw', but also in connection with 'catch fish'. In all languages there seems to be a single lexeme which denotes all kinds of catching, including the catching of balls (things thrown) and animals.

Dancing (10.440ff) is not a common activity (the only kind of dance that seems to be practiced occasionally is a kind of round dance, with people holding each other's hands in a circle). Most contributors needed some time to come up with an item they considered sufficiently close to Indonesian *tari*.

Among the entries for 'go' (10.470), forms based on *lampa* clearly make no reference to the direction of movement (away from speaker) but merely express a manner of movement ('go, walk' as opposed to 'run', 'jump'; etc.; note that *lampa* is also a common entry for 'walk' (10.450)). The remaining entries (*ma'o*, *makko*, etc.) may well contain a clearly directional component (see also the note on directionals in §3.8.12.1).

The meanings of the terms for carrying (10.605ff) need further checking. It was clear that the Indonesian terms were not always well understood by the contributors and that for some of the Tomini-Tolitoli terms no precise Indonesian equivalents could be offered. The additional explanations given by the contributors were very heterogeneous and hard to

interpret. The current cross-linguistic homogeneity of the entries is in part simply due to the fact that items of similar shape have been grouped together in one entry. This should not be interpreted to mean that the glosses provided are straightforward and unproblematic.

With regard to the terminology for ships and sea travel (10.815ff), the Indonesian word *cadik* 'outrigger' (10.832, Holle 1044) was hardly known. Not being fishermen or sailors, the contributors had problems in sorting out the various parts of an outrigger and other more specialised seafaring terminology, none of which was elicited systematically. As in many other languages, the items for 'to sail' and '(a) sail' are identical (cf. 10.880).

3.8.11 Possession, property, and commerce

Most terms belonging to the domain of commerce and property caused some problems because of a lack of clearly native terminology. Many of the obvious loans in this section are also clearly recognised as such.

Attempts to elicit terms for *memiliki* 'to own, to possess' in addition to *milik* 'possession' (11.120) had little success. Clauses meaning 'I own three cows' are rendered by constructions which are equivalent to 'my cows are three'.

Similarly, there appears to be no term corresponding closely to Indonesian *merugikan* 'to inflict a (economical) loss, to harm, to damage'. If any response was offered at all here, it was a term which corresponds more closely to *ganggu* 'disturb' (11.290).

The concept 'find' (11.320) is generally rendered by 'come upon' (10.480) or 'see' (15.510).

For 'weigh' the most common response was the word for 'scales' (11.925).

As in Indonesian, 'borrow' and 'lend' (11.620) are derived from the same base. Alternatively, this concept is rendered with an expression which is morphologically derived from the base for 'owe' (11.630), i.e. 'borrow' is seen as equivalent to 'become/be indebted to'.

The terms for 'expensive' (11.880) and 'cheap' (11.890) absolutely consistently take a prefix of the shape *ma-* as a stative marker (perhaps because they are loans?) although the typical stative marker is *mV-*.

Practically no responses were elicited for *mempersembahkan* 'offer' (Holle 1020), with the exception of the Tajio contributors who mentioned *somba*, which is also the term given for 'worship' (22.162).

3.8.12 Spatial relations: place, form, size

3.8.12.1 Deictics

For deictic expressions there is a three-way distinction between proximal (close to speaker), medial (close to hearer), and distal forms. The demonstratives, which may be used both pronominally and adnominally, are listed in Table 5.

Table 5: Demonstratives

	PROX	MED	DIST
BAL	nani/naini	tatu	ua
DAM	niani/nani	nana	'ua +DMB
PEN	moo	nao	uo
TJP	nee/nenee	tu'ee	mai
TTA	ini, nee	itu, tee/te	mai
TAJ	eini, he'ee	eitu, ha'aa	amai/amai'ee
AMP	nio	ana	mai
LAU	injéine BBG: injei	injaane	injoo'e
TIA	nio	naa	mai
DON	nio SLG: niní	naa	mai
TOL	ia/yaya	ana	itu
BOA	ia	ana	itu

Some of these forms are clearly morphologically complex. Note in particular the Lauje forms. In Lauje texts it is common to find *ine* for PROX, *ane* for MED and *o'e* for DIST. However, in elicitation these forms were generally judged to be unacceptable.

In Tajio, *(he)'ee* and *(ha)'aa* may also be used adverbially. In fact, in the conversations overheard by the compiler, there was hardly a clause without an emphatically uttered *'aa* or *'ee*. In eliciting clauses, however, as well as in the (few) recorded texts, these forms hardly show up.

The medial form was usually quite difficult to elicit (partly due to the fact that Indonesian has only a two-way system (*ini* PROX and *itu* DIST)). In testing the appropriate use of this form it generally turned out that medial distance from the speaker was not a relevant parameter. Closeness to the hearer seemed to play a role, but it is almost certain that other factors are involved as well, since the distal form can also be used to refer to objects close to the hearer. Clear instances where the use of the medial form is required (at least in Lauje and Dondo) include situations where the addressee holds the object referred to in her hands or wears it on his body.

Locative deictic adverbials (HERE and THERE) are formed by combining the demonstratives with a locative preposition. In most instances, this preposition is identical to the basic locative preposition of the given language, but this is not necessarily so (cf. entry 12.000 in the word list). The most remarkable example is Ampibabo-Lauje where the locative preposition is *li* or *i*, but deictic adverbials are formed with *pi-* (probably from *ampi*, see below).