CHAPTER SEVEN

SNAKES

7.1 The snake fauna of Seram

There are four families of snakes known from Seram: Typhlopidae (four species), Boidae (four species), Colubridae (five species) and Elaphidae (four species). Of these, six species were definitely recorded during field-work, and obtained as specimens in the Nuaulu area. There is evidence that the Nuaulu are familiar with between ten and 16 species.

A checklist of snakes reported for south central Seram is presented in table 11. Species identification compared with Nuaulu categories applied to actual specimens collected are set out in table 12.

7.2 Nuaulu categories applied to snakes

There are at least 20 Nuaulu terminal categories applied to snakes strictly defined, and all can be included within the primary category **tekene.** In referring to forms within this category, the term is almost always contracted to **teke** (e.g. **teke tuamana**). Snakes as a whole are totemic for the clans Somori (primary totem) and Nepane-tomoien (secondary totem), although in practice respect varies from species to species, being most important for **teke patona.**

7.2.1 teke tuamana

Members of this category are said by informants to be small burrowing snakes living under the ground (**tuamana** = 'ground', 'earth'). From informant's descriptions they are clearly worm snakes (Typhlopidae). No specimens have been obtained to date and they appear to be rarely found in the immediate vicinity of Nuaulu settlements. Four species are reported from Seram by earlier workers, three of the genus *Typhlops* and *Ramphotyphlops multilineatus*. The Nuaulu recognise no sub-division of the category **teke tuamana,** and since it is of no special significance ethnozoologically, and its precise contents difficult to track down, this is not entirely surprising. Indeed, the biological differences between the species are limited to some fine points of anatomy.

7.2.2 teke patona

The term **patona** (= AM 'patola') is used to describe a type of imported woven cloth important in certain rituals. **Patona** specifically refers to the pattern on such cloths, which is said to resemble the markings of the snake, or vice versa [c.f. Jensen, 1939: 372][1]. Barbosa reports its presence in Banda as early as 1518 and describes it as a cloth of silk or red linen with a special pattern [Rouffaer and Juynboll, 1914: 417]. Among other groups, such as the Christian Ambonese, it is part of bridewealth payments and fines payable in cases of adultery or murder [Cooley, 1962: 28, 30, 37].

The category corresponds precisely to *Python reticulatus,* the reticulated python, and is identified consistently as such by informants. Generally regarded as the longest of snakes, this species is commonly found in villages and adjacent areas. The larger pythons, of five or six meters in length, are normally restricted to nearby lowland forest areas, and it is these creatures that are of economic significance for the Nuaulu. Reticulated pythons are unquestionably the most economically important reptiles, and were the only ones to appear in a sample dietary record made for a four month period in 1970[2]. The gall bladder (**monie** = 'bile', 'gall bladder') is often sold to non-Nuaulu as medicine. Burkill reports that it is used by Malays as a draught for callous ulcers [Burkill, 1935: 1848]. It is also probably part of the overseas Chinese pharmacopoeia, where it is used as a cure for bloody diarrhoea, other disabling haemorrhages and malarial miasmas [Schafer, 1967: 216-7] The Nuaulu have no traditional use for it. The meat is sometimes cooked with fat (which is considered a delicacy) in lengths of green bamboo stoppered with leaves of *Languas speciosa* (**wainite**). More generally it is roasted using a rapidly constructed rack of saplings and green bamboo, about 60 to 100 cm off the ground.

Teke patona is the primary totem of the clan Somori, although avoidance behaviour is generally extended to other snakes, with the possible exception of **mainase** (7.2.8). It is one of the most notably autochthonous animals known to the Nuaulu, and, according to more than one informant, **teke patona** (with its many eggs) has given rise to **nopa inae** (one large egg), **poso** (two eggs) and the centipede, **niniane** (two eggs). On another occasion, a second informant added **kasa'un, hohone, isa, puo** and **imasasae** to this list. It is possible that the length of this list represents bias due to the clan affiliation of the informant being Somori.

TABLE 11 Checklist of snakes recorded in the Nuaulu region of south central Seram.

Species	Ecological zones 1	2	3	4	5	Nuaulu glosses
Typhlopidae - worm snakes						
Typhlops braminus	-	?	-	-	-	**teke tuamana**
Typhlops kraali	-	?	-	-	-	**teke tuamana**
Typhlops ligorostris	-	?	-	-	-	**teke tuamana**
Ramphotyphlops multilineatus	-	?	-	-	-	**teke tuamana**
Boidae - pythons and boas						
Morelia amethistina amethystine python	?	+	+	-	-	**teke soata**
Python reticulatus reticulated python	?	+	+	-	-	**teke patona**
Candoia carinata Pacific boa	-	+	+	-	-	**mainase**
Colubridae - colubrid snakes (harmless)						
Dendrelaphis pictus pictus	-	+	+	-	-	**teke tam niane, teke konomete**
colubrid snakes (mildly venomous)						
Boiga irregularis banded tree snake	-	+	+	-	-	**teke panarine**
Chrysopelea rhodopleuron	-	?	-	-	-	**teke msinae**
freshwater snakes						
Fordonia leucobalia	-	-	-	+	-	**teke waene**
Cerberus rhynchops	-	-	-	+	-	**teke waene**
Elapidae - elapid snakes						
Acanthophis antarcticus antarcticus death adder	-	+	+	-	-	**nanate**
Aspidomorphus muelleri	-	+	+	-	-	**?nanate**
sea snakes						
Laticauda colubrina	-	-	-	-	+	**teke nuae**
Laticauda laticauda	-	-	-	-	+	**teke nuae**

Key. Zone 1 = above 1000 meters, principally montane rain forest; zone 2 = tropical lowland rain forest; zone 3 = secondary rain forest, garden and village areas; zone 4 = freshwater and swamp forest; zone 5 = marine and estuarine.

TABLE 12 Species identifications compared with Nuaulu categories applied to snake specimens.

	teke patona	**mainase**	**mainase metene**	**teke tam niane**	**teke konomete**	**teke panarine**	**nana putie**	Number of informant responses	Number of specimens
Python reticulatus	5	-	-	-	-	-	-	5	5
Candoia carinata	-	7	1	-	-	-	-	8	7
Dendrelaphis pictus	-	-	-	8	2	-	-	10	2
Boiga irregularis	-	-	-	-	-	8	-	8	3
Acanthophis antarcticus	-	-	-	-	-	-	3	3	1
Total	5	7	1	8	2	8	3	34	18

7.2.3 teke (m)sinae

Msinae = 'red'. There is very little information available on this category, but it appears to correspond to *Chrysopelea rhodopleuron*.

7.2.4 teke panarine

This snake is described by informants as being small but long (the size of a small **teke patona**) and tree-dwelling. A common habitat is said to be the leaf bracts of the sago palm. It is not, however, to be confused with what in AM is called 'ular sagu' (sago snake), the grub of the sago weevil (*Rhynchophorus bilineatus*). The confusion is compounded by the fact that this snake is sometimes called 'ular saja' in AM.

Opinions on coloration vary from 'black and red', 'grey back, yellow body', 'red and yellow' to 'blue'. Despite such conflicting descriptions, it appears that the banded tree snake (*Boiga irregularis*) is being referred to; a

fanged species of notoriously variable colour, but generally thought not to be dangerous to humans. The term **teke panarine** was given in all eight responses to requests to identify three specimens of *B. irregularis.*

7.2.5 teke ai atu

Ai atu, 'treetop'. The term is used in a generic sense to mean 'tree snake'. Used in this way, one informant distinguished two kinds: **teke panarine** and **teke soata,** referring respectively to *B. irregularis* and to *Morelia amethistina.* It is possible that **teke ai atu** also refers to the mangrove snake, *B. dendrophila.* This snake is widespread throughout Indonesia, at least as far east as Sulawesi. It is strikingly banded in black and yellow and grows considerably larger than *B. irregularis.* This might more easily account for the remark about size, but without recorded specimens or more definite evidence it remains speculation.

7.2.6 teke tam niane, teke konomete

Tam niane can be glossed as 'return to the village'. The reason for this name is that whenever this snake is seen lying across a path the traveller must return to the village. With the clan Somori this rule applies to most snakes. It is quite clear from examining specimens, observation and interviews that **teke tam niane** refers to the immature form of *Dendrelaphis pictus.* **Teke konomete** refers to the mature form of *Dendrelaphis pictus.* The general prohibition on travel signalled by the appearance of **teke tam niane** is not extended to sightings of snakes in this form.

7.2.7 teke soata

Described as a large 'black and yellow' tree snake of the forest, as opposed to the village periphery and garden areas. According to one person, 'it can grow as thick as a human thigh'. It is sometimes hunted and eaten. The meat is separated from the fatty parts and roasted in much the same way as reported for **teke patona.** The fat is cooked separately as a relish and eaten with various kinds of root tubers, or used as cooking fat. One specimen identified as *Morelia amethistina.*

7.2.8 (teke) mainase

This snake is distributed widely in the Nuaulu area and is commonly found anywhere from house rafters to mature forest. It clearly corresponds to the genus *Candoia (= Enygrus).* The Nuaulu recognise two types of **mainase: mainase putie** (= 'white') and **mainase metene** (= 'black'). Five specimens (seven responses) of *Candoia carinata* were identified

consistently as **mainase putie.** One specimen was identified as **mainase metene.** These terms appear to be simply identifying colour morphs within the species.

Mainase is an interesting category in that its classification as **tekene** is somewhat ambiguous. The prefix **teke** is not indissolubly part of the term morphosyntactically, and taboos concerning snakes in general (as for the clan Somori) apply less strictly. They are sometimes ignored altogether. In justifying this practice, one individual suggested that it was not a 'true' snake. The reasons for this are unclear, but morphological differences may be relevant. *Candoia* is relatively short and fat compared with most other snakes known to the Nuaulu, the shape of the head appears to be somewhat different, and it is generally regarded as being relatively harmless. If a person is bitten by a **mainase,** the appropriate therapy is to immediately find and eat some chicken faeces.

7.2.9 (teke) nanate, mnanate

Nanate is the Nuaulu name for the Muslim village of Sepa, within the jurisdiction of which all Nuaulu villages lie. Known in AM as 'ular bisa' (= 'poison snake'), referring to the most important characteristic attached to it by the Nuaulu, this snake is regarded as the most dangerous of its kind, being able to bite and climb the body. The fear of **nanate** is exploited in its use for a type of scare charm (**wate**) by the clan Penisa. Bites are usually treated by tying a cloth, string or other tourniquet above the bite and placing a silver or alloy ring (**sopa nanate**) on the wound. No invocation is involved. The ring may be plain, but characteristically features a stylised human skull. The source of these charm rings is unknown but they were probably (and may still be) manufactured by smiths in Amboina, or even further afield. The constant wearing of the ring is said to afford protection. Rings of this type are also associated with **teke panarine,** but documentation concerning their use is less extensive.

In view of the fearsome reputation of **nanate,** it is curious that the clan Nepane-tomoien has a ritual relationship with it similar to that which the clan Somori has with the gecko. That is, if one is heard calling in the house of a sick person it indicates that an ancestral spirit has entered the snake's body to protect that person. The same rules of respect apply here as apply for the gecko.

There are three types of **nanate** (using the term in its narrow sense) recognised by the Nuaulu. First there is **nana metene** (= 'black'). This is also known as **nana mnakasopa unu,** referring to the way in which this snake 'lifts its head off the ground to look round' (**unu** = 'head'). This

behavioural trait appears to be characteristic of long thin snakes, but uncharacteristic of short fat ones - such as **mainase.** This type of **nanate** is also described as having a smaller head than other types. Secondly, there is **nana putie,** the 'white' **nanate,** and thirdly, **nana msinae,** the 'red' **nanate. Nana putie** corresponds precisely to the death adder, *Acanthophis antarcticus.* I am inclined to think that both **nana putie** and **nana msinae** are simply variants of this species. With its smaller head, **nana mnakasopa unu** may be *Aspidomorphus muelleri,* the existence of which on Seram has yet to be confirmed.

The term **nanate** is also sometimes used in a broader sense to include the lizards **nopa hanaie** and **nopa ina** (6.2.7.5), a practice which is discussed further below.

7.2.10 teke waene

Appears to refer to freshwater (**waene**) snakes, although also sometimes extended to anguillid eels. Two species of freshwater snake are recorded from Seram, *Fordonia leucobalia* and *Cerberus rhynchops rhynchops.* Specimens of neither were collected.

7.2.11 teke nuae

Nuae = 'sea'. These snakes are sometimes found in rock pools at low tide. The ventral surface is black and white, the dorsal surface differing according to variety. Many kinds of seasnake occur in seramese waters, although *Laticauda* is the only genus which habitually comes on shore. Of this genus, *L. colubrina* and *L. laticaudata* are reported.

7.3 Classifying the contents of the category 'tekene'

In its broadest sense the category includes all snakes (SERPENTES). In addition it is sometimes extended to include certain affiliated categories for lizards, invertebrates and eels (figure 11).

The invertebrate categories are **niniane** (centipedes), **nikenuke** (millipedes), **tuaman nae** (earthworms) and **ai ntone** (certain perichaet worms), all of which are described in more detail at chapter 14.1.5-9. In a card sorting test, **nikenuke** and **tuaman nae** were consistently classified with **tekene** (100 percent of a sample of 25 informants). This in itself does not necessarily mean that they are always regarded as **tekene,** but rather that the perceived resemblances between snakes, earthworms and millipedes are closer than between these animals taken together and other reptiles and amphibians. However, they are regarded by some informants quite definitely as **tekene,** although the failure to use the prefix **teke** on any occasion only

confirms their rather anomalous position. Additionally, apart from the covert 'worm' category already mentioned, these invertebrates are not even classified as a separate group in contrast to other kinds of **tekene** [c.f. Bulmer, 1968: 629-33].

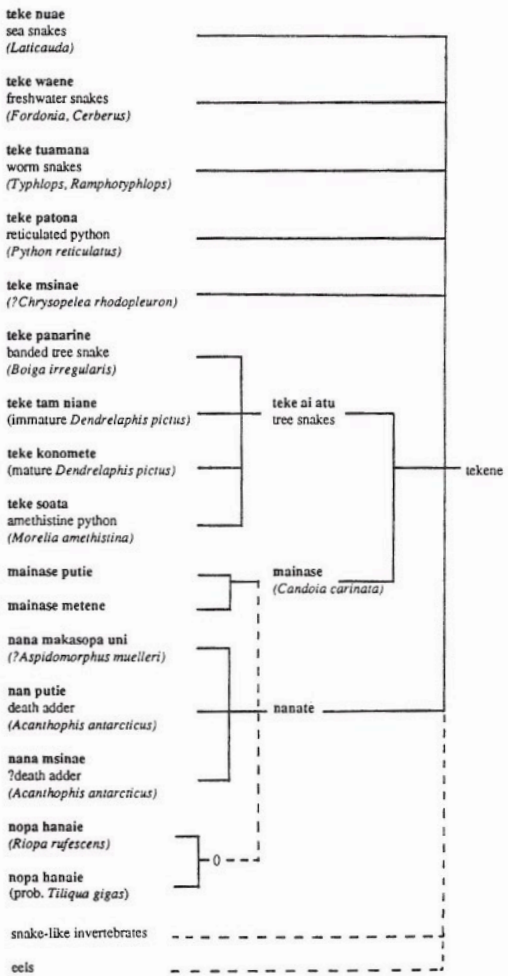
There are four other somewhat anomalous categories broadly grouped together as **tekene: mainase, nanate, teke nuae** and **teke waene. Mainase** has already been shown to be anomalous on morphological grounds and because of its relative harmlessness compared with most other snakes. **Nanate,** however, appears to be singled out for precisely the opposite reason - that it is the most harmful snake known to the Nuaulu. For this reason also it is often grouped with **nopa hanaie** and **nopa inae,** the most feared of lizards. Curiously, both **mainase** and **nanate** are sometimes grouped together as living on the ground rather than in the trees, under the ground or in water. **Teke nuae** is clearly anomalous because of its marine habitat, the morphological adaptations undergone by sea-snakes, and because of their similarity to certain eels. **Teke wane** may also be an ambiguous term for some Nuaulu, though of course many snakes will swim in freshwater if necessary and this would not seem to present a classificatory problem.

Eels present a special problem. The eel categories **awane** and **yapato** are systematically dealt with here in chapter 9, with other fish (**ikae**). Indeed, some informants were quite emphatic that eels were not **tekene**. Somori, for whom snakes are prohibited food, will eat eels; while Pia, for whom **awane** is prohibited, will eat snakes. On the other hand, a few informants concluded that perhaps eels were snakes which had become fish, and others still claimed that they definitely were snakes. The binomial **teke yapato** is sometimes heard, perhaps in part because because some seasnakes resemble moray eels quite closely.

Taken in its broadest sense, the category **tekene** can be conveniently sub-divided into a core group of 'true snakes' and a peripheral group of 'snake-like forms'. This is evidently in part morpho-syntactically motivated, but is supported by general classificatory evidence, as well as by explicit statements from informants. When the term **tekene** is used to include both groups, it is sometimes qualified as **tekene panesi** (= (in this sense) 'all', 'all of them', 'entirely' c.f. Indonesian 'segala') or **tekene pusirei** (= 'all of them', things).

'True snakes' are those consistently prefixed by the term **teke** (e.g. **teke patona, teke tuamana...**). In morphological terms they are distinguished from lizards by the shape of the head, the tongue, the length and shape of the body and (perhaps most importantly) leglessness. Behaviourally, 'true snakes' shed their skin, possess a distinct form of locomotion, are generally

FIGURE 11 Contents of the Nuaulu category **tekene** arranged as a taxonomy. The broken lines indicate variably attributed affiliations.



terrestrial and harmful to humans. By contrast, 'snake-like forms' are allocated to the primary category **tekene** on the basis of a varying assortment of morphological and behavioural criteria, but never possess the combination

of characteristics which distinguish 'true snakes'. In some cases, they may be allocated to the category on the strength of one or two criteria only. **Tuaman nae** and **ai ntone** are problematic on most grounds except that they have long flexible bodies, snake-like locomotion and are legless. **Nikenuke** and **niniane** even possess legs. **Awane** and **yapato** are excluded from 'true snakes' partly on the grounds of being aquatic, but perhaps also because of their overall fishiness. It is only to be expected that the peripheral grouping has grey areas of overlap between other primary and more inclusive categories, in both indigenous and phylogenetic terms.

I shall comment here on just two of the criteria of 'true snakes', leglessness and harmfulness, simply to indicate the problems surrounding the use of such criteria. Although I am satisfied as to the folk significance attributed to leglessness in defining **tekene,** one informant insisted on one occasion that snakes do - in fact - have legs, used when climbing trees. This seems to be a reference to the two hemipenes of the snake. He justified this statement by pointing out that giant millipedes (**nikenuke**) have countless legs and yet they are regarded as **tekene.** This represents an interesting case of an informant justifying an 'erroneous' observation as to the characteristics of 'true snakes' by reference to 'snake-like forms', a group set aside precisely because of the absence of this particular diagnostic characteristic.

On the question of harmfulness, it is important to distinguish animals which can recognizably cause harm from those that are feared. The two groups are not necessarily coterminus: harm is concerned with the objective behaviour of such animals, fear is bound up with an often complex set of attitudes. It is not my intention to explore Nuaulu avoidance and phallicism of snakes in detail here. What data are available suggest that fear of snakes (and lizards) versus other groups is not as marked among the Nuaulu as it is for the Kalam [Bulmer et al, 1975:300-4].

The Nuaulu distinguish in general terms between snakes that are harmful - **teke kahatene** (= 'dangerous') and those that are harmless - **teke iake** (= 'good'). Sometimes a particularly dangerous snake is specifically termed **teke kahatene** (in AM, 'ular setan', demon snake). This is most commonly applied to the death adder, which explains the partial synonym **nana sakahatene** (see section 7.2.9). **Sakahatene** is a type of evil spirit, and use of the term indicates a belief that it is 'guarding the jaws' of the creature. The slaughter of such an animal is said to bring great problems. For one informant:

> If it is possible to trace the snake to its lair - which is difficult - the hole will be found to be closed up - because it is a **sakahatene.**

Harmfulness is therefore a characteristic of 'true snakes', although not all snakes are as harmful as others. **Mainase** is not a 'true snake', partly on morphological grounds, but partly because it is regarded as harmless. On the other hand, **nanate** is not a 'true snake' because it is regarded as being exceptionally dangerous. Clearly, while harmfulness is a characteristic of 'true snakes', extremely harmful ones are accorded a special classificatory status. In the case of **nanate** it means that it is lumped with other reptiles for which there is a marked aversion - **nopa hanaie** and **nopa inae** (figure 11).

7.4 Variation in the classification of the contents of the category 'tekene'

Nuaulu identifications of snakes appear to be on the whole consistent. The kinds of variation found in Nuaulu classification of the contents of the category **tekene** are of three basic types:

1. variation as to whether certain forms are to be included or excluded from the category **tekene** in its widest sense;

2. variation as to whether certain categories are to be included or excluded from the category of 'true snakes'; and

3. incidental variation stemming from the omission or incorporation of particular degrees of inclusiveness, as with the examples given for the classification of lizards and crocodiles.

Category allocations which are not universally shared by adult Nuaulu are depicted with a broken line in figure 11. The shape of the classificatory structures elicited must therefore be expected to vary, both between different informants and for the same informant on different occasions and in different contexts.

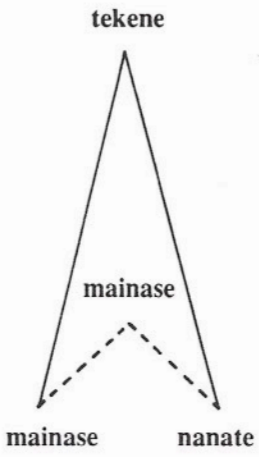
Variation of the first type applies to six terminal categories, covering **awane, yapato, nopa hanaie, nopa inae** and the invertebrates. None of these typically include phylogenetic snakes, though **awane** and **yapato** may occasionally do so. The status of the invertebrates has already been commented upon.

The only other point which must be made with respect to this first type of variation relates to the unusual position of **nopa hanaie** and **nopa inae.** These categories were never described to me as **tekene,** although they were on occasions said to be **nanate.** Since **nanate** are definitely said to be **tekene,** one might argue on syllogistic grounds that **nopa hanaie** and **nopa inae** are therefore, in fact, **tekene;** but there is absolutely no evidence to suggest that this is how the Nuaulu view the matter and some definite evidence that they would eschew such an approach. Nuaulu ethnozoology suggests that syllogistic logic is not a fundamental part of folk classification as it is in

Linnaean taxonomy.

The second kind of variation applies to the status of the following categories: **teke wane, teke nuae, mainase** and **nanate.** The anomalousness of these categories which accounts for such variation has already been discussed.

The only significant example of the third type of variation concerns the broad use of the term **mainase** to refer to both **mainase** and **nanate:**



It is so because of the otherwise contrasting features of these two lower-order categories, and because (apart from **teke waene** and **teke nuae**) they are the only other SERPENTES in the peripheral category. The same kind of variation undoubtedly occurs with respect to **teke tam niane/teke konomete,** where the variable element is the degree to which the covert category '0' is recognised. Finally, the degrees of inclusion indicated by the terms **teke ai atu** and **tekene** (narrow sense) may sometimes also be omitted. The reason for the significance of the **mainase/nanate** variation is that here the intermediate term **mainase** (wide sense) brings together categories that are usually quite distinct. In the other cases the relationship between the terms is normally understood, although an intermediate classificatory grouping may be sometimes omitted.

Notes to Chapter 7

1 Gonda, 1973: 95-6 reports that in Malay and other Indonesian languages **patola** has a cluster of meanings on the theme of 'gaily coloured cloths'. It is evidently derived from Sanskrit where it refers to both a silk double ikat [Barnes, 1989: 19, following Bühler], originally Gujerati, and to an edible gourd, *Trichosanthes* spp. According to Burkill, 1935: 2178 this latter usage also occurs in Malay as **petola ular,** 'snake gourd'.

2 **Teke patona** was eighth in importance in a list of 12 sources of animal protein: 150 grams was consumed per adult head in two households during the survey period giving 0.67 per day (0.01 gram of protein, 8.82 Cals.) [Ellen, 1975b: 138].