The word "drum" is often used to refer to three distinct instruments in the New Guinea area. A true drum usually consists of a hollowed-out wooden body, open at one end and closed at the other by a skin. Sound is produced by striking the skin with the hand. In contrast, a slit-drum lacks any skin and, therefore, is technically not a drum at all. The solid body is hollowed-out through a slit in the top and the sound is usually produced by hitting the instrument with one or two sticks. Finally, although the shape of a water drum may resemble that of a true drum, it lacks a skin. Instead, such instruments, always played in pairs, are alternately thrust in and out of water to produce sound during male cult activities. Water drums are only found in the Middle Sepik area and will not be further...
discussed here. Instead, this essay focuses on drums and slit-drums, as technically differentiated above. Both instruments are of tremendous importance to the peoples of the New Guinea area, but their morphology, distribution, and usage differ considerably.

By their very nature, museums must often display artefacts removed from their cultural environment. In the case of drums and slit-drums, the situation is particularly problematic because both instruments must be humanly activated to produce sounds. While they can be viewed as artefacts by themselves, their forced silence deprives them of a key element of their nature.

Drums
Because they are almost ubiquitous in the New Guinea area, when considering the distribution of drums, it is easier to point out where they are absent. Drums are absent from much of the Highlands of west New Guinea. In contrast, in the Papua New Guinea Highlands, only some groups speaking Angan languages lack the instrument. Furthermore, it is absent from much of the New Guinea islands, to the north and northeast of the mainland: much of Manus
Illus. 3
Hands beating drums. Headdresses made from feathers and shells. The alignment and the repetition add to the impression of power and virility that this group exudes.
PNG, Highlands, Mount Hagen. Photo Josette and Charles Lenars.
province, the northern part of New Ireland, the Baining area of New Britain, and most of North Solomons province. Interestingly, it is also absent from Rossel Island, at the end of the chain of islands extending eastwards from the mainland. Here, a language is spoken which is more related to those in the Solomons to the east (where drums are absent), than to much nearer islands to the west. In spite of these absences in Papua New Guinea, the drum forms part of the country’s national emblem.

Drums are also found in the islands of the Torres Strait, separating New Guinea from Australia, and among some groups on Cape York Peninsula, but are otherwise absent from Australia. Also absent from the Solomon Islands, drums re-appear in northern Vanuatu and then in eastern Polynesia, although in quite different forms.

The accompanying map (map a: drum distribution) shows this distribution in the New Guinea area. However, such maps can only be approximate.
are found in different languages across the north of Papua New Guinea and in parts of the Highlands. Such terms may also be related to words such as kwangguw, duwang, and wot. The recent introduction of the instrument to some parts of the New Guinea islands is also revealed in names resembling kundu, the word for "drum" in Tok Pisin (New Guinea Pidgin), the most widely spoken language in the country.

 Everywhere, the skin of the drum is struck with one hand. The other hand most often holds the instrument, either by grasping a handle or the body of the instrument itself. The rhythms played on the drum vary considerably. In some regions, massed dancers play a different succession of rhythms in unison, signalling changes in dance movements, melodies, and/or song texts. Probably most commonly, the same rhythm is played throughout a particular genre of song and dance, perhaps only varied to conclude. In other areas, drums are not beaten in unison, but asynchronously. This practice noticeably appears in some areas where drums are a recent introduction. Perhaps such asynchronous playing is an attempt to imitate the sound of the rattles formerly used.4

The drum is most often a secular instrument, used in song and dance celebrations for various occasions. While played by women in some areas, everywhere men are drummers, and often the drummers are dancers and singers as well. In other areas, drummers sing while standing (illus. 3) or sitting, with dancers forming a separate group. A drum might be
Wochu ceremonial drum, Lake Sentani region. See cat. 15.

Illus. 5

prepared with love magic to make it call out a potential lover's name. Everywhere, a well-decorated drummer is attractive to the opposite sex (illus. 4).

However, as in most attempts to make general statements about New Guinea, there are notable exceptions where the drum has an esoteric function associated with male cult activities. In the Telefomin area, male youths only learn to drum at the fifth of seven stages of initiation, when they are in their twenties. Drums here are not themselves secret, but the knowledge to play them must be learned through ritual and, most importantly, the significance of the playing of the instrument and its sound, its relation to various cultural heroes, and to taro, death, maggots, decay, and fertility, are only things revealed through initiation (Brumbaugh 1979: pp. 240-241, 368-375; 1990: p. 69). 5

In some areas there are both public drums and esoteric ones. Among the Keraki a secret "female drum" of distinctive shape is shared with groups to the west (Williams 1936: pp. 436-437). In the Gogodala area, there are two types of public drums, and a secret drum, *diwaka*, one of the most sacred cult objects, never seen by women and uninitiated boys, and only beaten during the *aida* ceremony (Crawford 1981: pp. 197-198, 350-352). While most
Illus. 6
Three men beating the rhythm on their ritual drums. PNG, Maprik district, Abelam cultural area, Nyamikum village. Photo Ludovic Coupaye (2003).

Drums in New Guinea roughly average 80-100 cm in length, some diwaka are over 250 cm, requiring the instrument to lie on the floor and its player to be seated. Another esoteric usage of drums is found in the Maprik region. While drums are publicly played as elsewhere, in male cult usage their skins are removed and the ends of long bamboo voice-modifiers are placed into the drum bodies. Secretly singing into the bamboos, men’s voices are changed to water spirit voices through the modifications in sound resulting from the bamboos and skinless drums (Tuzin 1980: pp. 129, 242-244).

Drums throughout the region are usually made of wood, although species vary considerably, with different groups preferring heavy and hard or light and soft woods. Drums are often hollowed out by alternately chiselling, scraping, and burning from each end, leaving the central constriction until last (illus. 1). Before this is removed, a small ritual may be performed to ensure the drum does not break and that the sound is as desired (e.g., Feld 1983: p. 81). Instead of wood, bamboo is sometimes used.
for children's instruments or those used by sorcerers, so that their instruments are not too loud and attract attention to their activities (Landtmann 1933: p. 69). A much rarer material is clay, only used in three villages in the Adzera area (May and Tuckson 1982: pp. 143-144).

In lowland areas, the drum skin frequently comes from a type of monitor lizard (Varanus sp.). In coastal areas of Southwestern Papua New Guinea, however, a type of sea snake is preferred. Different snakes are used in other parts of New Guinea, as are sporadic occurrences of cassowary, megapode, pig, globe fish, ray, shark, and dog, as well as introduced species such as cow, deer, or goat. Wallaby skins are used in lowland areas along the Fly River. Other marsupials, particularly species of cuscus or ringtails, are used in highland areas where large lizards are scarce. Today, plastic bags may substitute for traditional sources of skins or plastic pipe for the wooden body. However, the sound quality will be poor and such constructions would only be made when proper instruments are unavailable.
Cat. 166a
Hourglass-shaped drum. PNG, Madang Province, Bogia coast, Awar or Manam Island. The complex incised design on the surface of the drum echoes the delicate handle with its curved beaks. Formerly J. and Ch. Lenars collection. H: 56.5 cm. Inv. 4099-34.

Cat. 166b
Detail of cat. 166a. A reading of this spiral design reveals four large faces in the meanders created by the spiralling incisions.

Cat. 167 (facing page)
Kwungv hourglass-shaped drum. PNG, East Sepik Province, Middle Sepik, Iatmul area. The bird, here carved into a handle, once saved one of the ancestor brothers hidden inside a drum left floating on a lake. Formerly Charles Ratten collection. H: 61 cm. Inv. 4090.

For artefacts in a museum, without knowledge of the materials used for construction or how they are sounded in performance, the morphology of drums is probably their most distinctive feature. While there are certain shapes which seem to be associated with particular regions, there has always been considerable trade in drums and this has certainly increased in the last century. Today, it is very common to find a drum shape traditionally associated with one region now used in another.

In examining the morphology of drums, it is useful to consider such questions as: is the end with the skin smaller, larger, or the same diameter as the open end; is there a handle and, if so, where is it placed and are there carved extensions on either side of it; is there a narrowing in the diameter of the drum and, if so, is it in the middle or towards one of the ends; are there any carved or incised
Decorations on the drum; is the open and cut off straight or in some other form; how is the skin secured to the drum body? Such questions will be considered in relation to the drums from the Barbier-Mueller collection.

The drum from Cenderawasih Bay (cat. 164) is relatively short with the end for the skin larger than the open end, a narrowing in the body (or waist) towards the open end, and a handle with carved extensions extending from both sides (cf. illustrations in Clercq and Schmelz 1893; Kunst 1967). More elaborate openwork handle extensions are found on Asmat drums along the southern coast of west New Guinea, where the drum body is often an hourglass shape, i.e., with a central waist and ends.
of roughly equal diameter (cat. 173). The skin is held in place with a rattan band. The handles of Asmat drums are frequently carved with symbols of headhunting, e.g., the hornbill, black cockatoo, or the praying mantis with a human head (Gerbrands 1967: pp. 204-220; Konrad, Konrad, and Schneebaum 1981: pp. 135-141).

Moving to the northeast, near the mainland border with Papua New Guinea, are the distinctive drums of Lake Sentani (cat. 15). Here the handle is towards the skin end, the waist more central, and with carving on the drum body. The skin, which is often made from cassowary, is held in place with a thick circular band of rattan or bark (Sande 1907: p. 305; Kooliman 1959: p. 22).

Drums usually associated with the Marind area (cat. 126) are actually found over quite a wide region, beginning west of the Marind area and extending to the Fly River (cf. Wirz 1922: p. 83; Landtmann 1927: pp. 34-44; Williams 1936: pp. 435-437). Such drums are often quite large, with massive rectangular handles, a cylindrical central waist, and characteristic carving on the handle bands and open end (illus. 4). A wallaby or tree kangaroo skin is attached to the drum using a mixture of glue, lime, and blood from the penis of a newly-killed animal (Wirz 1922: pp. 83-84; Busse 1987: p. 274). The use of such blood is said to help the drum produce a clear sound, emphasising the sound-producing nature of these instruments. While it is important to properly secure the skin (illus. 11), in actual performance,
much time is often spent tuning drums. Often this is accomplished through a combination of heating and tightening the skin of the instrument over a fire and adjusting small blobs of beeswax placed on the skin. In contrast, in some regions the skin is moistened with water or no tuning blobs are used at all. The sound of the drum is key: in the Kaluli area, for example, a properly tuned drum begins as the voice of a bird and eventually transforms into the word “father” (Fedl 1983).

Like the Asmat region, the Sepik River area is famous worldwide for wooden carvings, and drums are also distinctively treated. Two examples in the collection are from the Middle Sepik (cats. 44, 167). Here, drums are often made of hard woods, making the instruments very heavy. The shape of these instruments may be hourglass, or with the open end larger than the closed one, while the handles are frequently carved in the shape of a recognisable lizard, bird, snake, crocodile, or human face, while spirals and ovals are incised on the lower part (cf. Keim 1966: Abb. pp. 155-164).

In the Lower Sepik and to the east in the Lower Ramu, drums are usually in hourglass form, with elaborately incised designs on all parts of the drum, often within scallop-shaped boundaries (cat. 166). Such symmetric instruments were recognised as one of four types of Sepik drums by early German researchers (Reche 1913: pp. 423-433). Similarly carved hourglass drums can also be found much further eastwards along the northern coast (Bodrogi 1949).
Illus. 8

On the North Coast, large garamut slit-drums are also kept in the ceremonial house. PNG, North Coast, Madang Province, Kairi. Photo A. B. Lewis, 1910. © Archives Field Museum, Chicago. A-33394(454).
To the north of the Sepik, among Abelam speakers, drums show some similarities to lowland and Middle Sepik instruments. However, the carving on the body and handle of the Barbier-Mueller example (cat. 165) is not as elaborate and is filled in with blue, red, and white colours (cf. Koch 1968: Abb. pp. 96, 98-99). The skin is tied to the handle with rattan strips.

The examples from the Gulf of Papua (cats. 171-172) display another distinctive form of drum in the New Guinea area. Here, the open end of the drum is not cut off straight, but carved into two "jaws". In the literature, such an end is often called "fish mouth" or "crocodile mouth", but it is not clear whether these are local explanations or attempts by writers to find descriptive terms. While the examples shown here are the most familiar forms because they are from coastal areas and have long been collected and documented (Landsmann 1927: p. 44; Wirz 1934: pp. 45-46; Williams 1936: p. 438; Crawford 1961: pp. 197-198, 350-352), such a distinctive treatment of the open end of the drums is also found inland and in areas quite removed from the Gulf—for example,
Illus. 9 (left)
Man engraving the design on a slit-drum. The form of these designs varies considerably from one region to another, as do the motifs. PNG, Lower Sepik River, Muraken village.

Illus. 10
The sculptor hollows out the drum with an edze. He carves the most legible motifs first, and then inserts spirals and indentations. PNG, Lower Sepik River, Muraken village.

The open end of one type of drum in the Torres Strait also displays two “jaws”, although here they are not symmetrical, and there is no handle (cat. 120). On such drums, the waist is very narrow and there are incised designs along the “jaws” which may further be decorated with dried fruit nut rattles and cassowary plumes. Although particularly associated with the western islands of the Torres Strait, a number of authors note a New Guinea mainland origin or its previous importance there, now having been replaced by drums such as those used by the Marind (cf. Haddon 1912: pp. 278-279; Landtmann 1927: p. 43).

Other distinctive treatments of the open end of drums are rare. However, an example from Sentani shows two “legs” (Kunst 1967: p. 62, ill. 23) and one from the Fly displays a nose, arms, legs, and penis (Newton 1961: p. 42). Throughout much of New Guinea, the parts of the drum are indeed referred to using the names of body parts, but such explicit representation is exceptional.

The example from the Trobriands (cat. 170) represents the smallest drum in New Guinea, some only twenty cm long. Such *katumenìa* drums are played by the leader of the drummers here, other men playing similarly shaped larger instruments (illus. 12). Drummers and singers stand in the centre of a circle.
of dancers, who move around them counter-clockwise. The leader signals changes in rhythms and dance patterns during harvest festival performances (Malinowski 1916: pp. 373, 380-82). In the Trobiands and on parts of the adjacent mainland, drumming may also accompany dancing without singing (Schwimmer 1979).

Slit-Drums
In contrast to the near omnipresence of drums throughout the New Guinea area, wooden slit-drums (map c: slit-drum distribution) Humboldt Bay marks the western-most presence on the mainland (Sande 1907: p. 304). Slit-drums are then present along the coast eastwards (cat. 168) until south of Lae, with the only major incursions inland being along major rivers, such as the Sepik and Ramu. They are found on most of the islands to the north, except between the mainland and New Britain, and continue through the Solomon Islands and Vanuatu. Far removed from this area are isolated occurrences among the Yonggom (Kirsch 1991: pp. 203-204) and Muyu (Schoo 1993: pp. 61, 186). Like drums, slit-drums are also now being used in areas which traditionally lacked them.

As mentioned above, the slit-drum generally consists of a log, hollowed out from a narrow slit at the top. However, the western-most form resembles a beam. Sound is produced by hitting the instrument near the slit, with one or two sticks or a number of canes bundled together, usually by one player, but sometimes by two. Both of these features are regionally
distinctive, as is the way in which the stick impacts the slit-drums. In some areas, the end of the stick is jolted against the instrument; in others, the side of the stick is struck against it.

Everywhere, one of the main uses of the slit-drums is to communicate messages, for example, the arrival of visitors, a death, or to ask someone to come. In such cases, only one instrument is used. Although much needs to be explored concerning such messages, they do not directly imitate spoken language, as in some other parts of the world. Rather, messages appear to be constructed of different rhythmic parts which convey certain pieces of information, such as the name of a clan, the word for "man", a verb indicating a particular action, etc. These are put together to form a limited range of messages (Zemp and Kaufmann 1969). The hitting of an object to communicate messages is also found in folktales from areas which lack any type of slit-drums. For example, in the Highlands Melpa area, signalling on trees using agreed upon signs is mentioned in one story (Vicedom and Tischner...
1943-48: vol. 1: pp. 98, 231; vol. 3: pp. 118-119). Thus the use of such communication may extend beyond the distribution of the artefact itself.

In addition to communication, slit-drums are used in many regions as an accompaniment to public song and dance, sometimes played singly, other times in ensemble, with different size instruments playing different rhythmic parts. Special houses are constructed for slit-drum ensembles in the Buin region. However, in New Britain, slit-drums appear to go in and out of favour as instruments for dance accompaniment among some groups (Laade 1999: p. 162).

In other regions, slit-drums are important elements of male secret cult paraphernalia, given personal names, and their sounds represent or combine with other instruments to create spirit voices (Newton
1971; Gourlay 1975). In parts of the Sepik, slit-drums are kept in men's ceremonial houses (illus. 7, 8) (e.g., Bowden 1983: pp. 49-50; Teibar 1998: pp. 189-190). Virtuoso performances on two or more instruments are an important feature of Middle Sepik ritual life (Spearritt 1979).

As the construction of slit-drums is a difficult job, their completion and first public playing is often marked by celebration. Some slit-drums may be undecorated, others may have one end carved to represent a head, with the “eyes” cut through to enable the heavy instruments to be dragged by a rope. In other areas, there may be elaborately carved lugs at each end of the instrument (cat. 168). Similar variation is also found in incised or relief designs on the body of the slit-drum: from no designs at all to carving on both sides of the instrument? (illus. 9-10).
The slit-drum in the Barbier-Mueller museum (cat. 168) is typical of instruments from the Lower Sepik and Lower Ramu areas, which have long received the attention of ethnologists and collectors (e.g., Graebner 1902; Kelm 1988: pp. 374-383). Such instruments are distinguished by the extensive spiral and oval relief carving on both sides of the slit-drum body. Lime is often rubbed into these
designs to highlight them. Setting off the relief section is a half-oval empty region extending from the slit and empty vertical bands at each end. The lugs at each end are often carved in the shape of a masked figure, with an animal crouching on the figure’s back (Penney 1980: pp. 349-354). Villages at the mouth of the Ramu are particularly noted for carving such instruments (Tiesler 1969-70: pp. 83-85). From there, they were exported westwards through trade, often with Manam Islanders acting as middlemen.

Drums and slit-drums remain vitally important instruments for many aspects of life in the New Guinea area. Even as artefacts, distant from their homes and their voices silent, they reveal much about the artistic traditions which have created them.

Notes:
- Although almost fifty years since its original publication, Fischer (1968) remains the most important collection of information on sound-producing instruments in Oceania.
- I use the term “New Guinea area” to refer to the region comprising the independent nation of Papua New Guinea in the east plus the Indonesian province of Papua (formerly, Irian Jaya) in the west. Where necessary, I will use “east New Guinea” to indicate the Indonesian province of Papua, in order to avoid confusion with the southern region of Papua New Guinea, which is also popularly referred to as “Papua”.
- As another example, in the Fo area, some men told Williams (1977: pp. 193-194) drums were introduced with the Ussae dance, while other men said such dances were originally performed with rattles.
- Telol bamboo jaw’s harps, instruments also rarely associated with male cults in other parts of New Guinea, are considered small versions of drums and are surrounded with similar prohibitions (Brumfield 1972: pp. 360-363).
- The much smaller bamboo slit-drums will not considered here.
- Reiche (1933, pp. 441-442) and Penney (1960) provide useful surveys of Sepik slit-drum types.