

A

A1

ABAXIAL, ABAXILE

The first sculptural shape of the BLIND ALPHABET PROJECT is a wheel rotating around a displaced axle. It was made on Friday 1 January 1993 and illustrates the adjective *abaxial*, also spelt *abaxile*. *Abaxile* is the less frequently used word. The concept denotes a state of not being in the axis, of being eccentric, as in being away from an axis or centre. The Latin prefix *ab* means 'off' or 'away from' and *axis* in turn denotes the pivot around which something turns. Both words were introduced into English as botanical descriptions in the 1850's. *Abaxial* may be used to describe the displaced midrib of a leaf. The lower or ventral surface of a leaf, that is the side facing away from the stem or axis, is the *abaxial* surface. The eccentric behaviour of the wheels on leapfrogging entertainment vehicles is due to *abaxial* axles. Two handholds made of Mahogany (*Swietenia macrophylla*) on either side of the wheel allow it to be pushed, albeit with a somewhat galloping motion. The darker wood of the wheel itself is Imbuia (*Phoebe porosa*) and the lighter wooden discs towards the centre of the wheel are suspected to be Gramin (*Gonystylus* sp.).

A2

ABBOZZO

This jagged carving completed on Saturday, 2 January 1993, is an example of unfinished, preliminary work needed to indicate the general composition at the beginning of a sculpture. It is a block, clumsily hewn from a Jacaranda (*Jacaranda mimosifolia*) trunk and then shaped by means of an electric saw into a vaguely cylindrical mass so that the rough slices left by the saw-teeth are still showing. Such rugged carving is called *abbozzo*. The word also indicates a rough preliminary sketch or underpainting, in monochrome, of a painting. *Abbozzo* is an Italian word that means 'sketch or outline'. As a stylistic element in finished sculpture, it is used by renowned contemporary artists such as George Baselitz (born 1938). His use of an axe for the sake of obtaining very coarse lacerations on very large, primitive wooden figures is well known. Franz Kline (1910 to 1962), the famous Abstract Expressionist painter, is but one who has benefited by fixing a raw foreground over and around an *abbozzo* background to obtain stark and streaky blocks in his compositions.

A3

ABNORMOUS

A sliced-up, disproportionate triangular block was made on Friday, 15 January 1993. It consists of a grouping of three, thinner, broken triangles. The Oregon Pine (*Thuja plicata*) triangle in the centre is flanked by one in Rhodesian Teak (*Baikiaea plurijuga*) and one in Merbau (*Intsia* sp.). All the triangles are cut into pieces of varying width. The cuts are parallel to the three base-lines. The loose components resemble the initial triangular block in a somewhat displaced and jarred manner. This composite, irregular triangle illustrates the word *abnormous*. Derived from the Latin *abnormis*, for 'deviation from the rule', this adjective was introduced into English in 1742. Any shape and even abstract things can be *abnormous*. The Latin phrase *abnormis sapiens* indicates unschooled people. The dubious character of a criminal is sometimes referred to as *abnormous*. For clarity, a simple, recognisable shape, a triangle, was changed into something that was still a triangle, but one no longer in its *normal* shape. For display purposes, this *abnormous* triangle can be made to stand on its base. *Abberant* is often used instead of *abnormous*.

A4

ABOUTÉ

The profiles of two elephants are posed, facing in opposite directions with their buttocks pressing together. The heraldic term for placing beasts, birds, monsters, fishes, reptiles and any other charges end to end is abouté. An heraldic charge or ordinary can be anything borne on a shield or on another charge. The word *abouté* is taken from the Old French *abouter*, a combination of *a* plus *bout*, which meant 'to join two things end to end'. The more recent French *butte* means 'hillock' or 'mound'. That is why the two protruberances of the rump are called *buttocks*. The English *abut*, a more commonly used term for 'placing two pieces end to end', is also derived from the French. The bodies of the two elephants *abouté* are made of Imbuia (*Phoebe porosa*), with their ears of Rhodesian Teak (*Baikiaea plurijuga*) and the base on which they are placed, of Iroko (*Chlorophora excelsa*). This sculptural illustration was made on Saturday, 24 April 1993.

A5

ACCIPITRINE, ACCIPITRAL

This hawk's claw, clutching onto a branch, is carved from Burmese Teak (*Tectona grandis*). The idea came from the word *accipitrine*, meaning 'like a hawk', especially 'like a hawk's claw'. The Latin word for a hawk is *accipiter* and birds of prey are zoologically classified as *accipitrines* or *raptors*. A certain surgical bandage for the nose that resembles a hawk's claw is therefore aptly named an *accipiter* by the medical profession. The distant likeness to an *accipitrine* claw is a clear example of how morphological words can come about through the

Latinizing of the things resembled. As such a vague resemblance, indirect interpretation or abstraction, the concept *accipitrine* was ideal for inclusion into the BLIND ALPHABET PROJECT. It was made on Wednesday, 13 January 1993. *Accipitral* can also be used instead of *accipitrine*, however, *accipitral* is more suitably used to describe the hawk-like characteristics of keen-sightedness or rapaciousness.

👉 **A6**

ACCOLLÉ, COLLARDED, ACCOLLATED

These two adjacent heraldic shields are cut from a single piece of Imbuia (*Phoebe porosa*). They represent the heraldic terms *accollé*, *collarded* or *accollated* which mean 'side by side and touching'. Of the three terms, *accollé* is the more frequently used. *Accollated* is hardly ever used. In French, the verb *accoller* means 'to place side by side'. Two conjoined heraldic lozenges or two busts on a coin can also be described as *accollé*. A shield is the primary means for the display of heraldic arms and the shape of the shields in this illustration dates back to the early fourteenth century. It is also the type of shield-shape most frequently used in the BLIND ALPHABET PROJECT. *Accollé* can also occasionally be used as a synonym for gorged, that is having the gorge or neck encircled with a coronet etc., or for entwined about the neck, or for collared, that is, wearing a collar around the neck. The Old French *acoler* means 'to embrace'. The work is made of Imbuia and was completed on Monday, 26 April 1993. The three Braille labels are of Rhodesian Teak (*Baikiaea plurijuga*).

👉 **A7**

ACICULATE, ACICULATED, ACICULAR

A cylindrical hollow in an Imbuia (*Phoebe porosa*) block is filled with one thousand toothpick prickles of Poplarwood (*Populus* sp.). The spiky surface created by the many points is *aciculate*. The adjectives *aciculate* and *aciculated* mean 'furnished with *aciculae*', or 'spinescent', with specific reference to a prickly touch rather than a single, dominant, spinescent shape. Wire brushes, cacti, porcupines, all have composite *aciculate* surfaces. The words also mean 'marked as with needle-like scratches'. *Acicula* is the Latin diminutive of *acis* or needle and in morphology, an *acicula* is any slender needle-like shaft or spine found in the animal, plant or crystal kingdoms. *Acicular* describes a needle-likeness in general, that is, with reference to both touch and shape. *Aciform* and *aciculiform* describe the shapes of needles and needle-like structures rather than denote their prickliness. In the BLIND ALPHABET PROJECT they are placed under *aciform*. This *aciculate* piece was created on Wednesday, 6 January 1993.

👉 **A8**

ACIFORM, ACICULIFORM, ACICULAR

A small Oregon Pine (*Thuja plicata*) box contains eighteen needles made of Zebrawood (*Dalbergia melanoxylon*). Among the needles is a small wooden block also of Zebrawood with the words *aciform*, *aciculiform*, *acicular* embossed in Braille on it. Some of the needles have eyes pierced into them. There are sewing needles for sewing on buttons, and others for sewing together large sacks as well as a few knitting needles. The Braille is written on a loose block of Camelthorn wood (*Acacia erioloba*). *Aciform* describes the shapes of larger needles and needle-like forms such as those found in animals, plants and crystals. *Aciculiform* is taken from *acicula*, the diminutive of *acus*, which is the Latin for needle and it describes the smaller needle-like forms. *Acicular* indicates both, needle-like forms and textures. For words that denote prickliness and needle-like textures, see *aciculate*. This work was made on Tuesday, 5 January 1993.

👉 **A9**

ACINACEOUS

A bunch of sixteen large carbuncle-like berries are clustered around the end of a single leaf-blade in reference to the adjective *acinaceous*. Like the word *aciniform*, *acinaceous* comes from the Latin *acinus* which means 'a berry growing in a cluster' or 'a kernel'. *Aciniform* as more indicative of a kernel-likeness, is entered as that elsewhere in the BLIND ALPHABET PROJECT. *Acinaceous* in turn points to a resemblance in form to the fleshy part of grapes or berries, especially to the forms of raspberries, or berry-like fruits in clusters. In anatomy, a sac-like, clustered gland like the pancreas, is called an *acinaceous* gland. These *acinaceous* berries were made on Monday, 19 July 1993. The form under which it was made at that time, a *botryoid*, also indicates a grape-likeness. The three forms made under *aciniform*, *acinaceous* and *botryoid* were later swapped around to be more correctly named. Imbuia (*Phoebe porosa*), Stinkwood (*Ocotea Aubl*), English Oak (*Quercus robur*) and Kiaat (*Pterocarpus angolensis*) were used in this piece.

👉 **A10**

ACINACIFORM

This curved leaf-shape, made on Thursday, 7 January 1993, carries the lettering *acinaciform* in Braille. In botany, some leave-types are named *acinaciform* after the Greek and Persian word *akinakes* for the short, curved and single-edged scimitar, a sword introduced by the ancient Persian warriors. In English, the word *acinaces* for the scimitar still applies. The western sword is straight, longer and of a more even thickness. Shapes that resemble this western straight-sword are called *ensiform*. The scimitar is always curved, but varies in form, from those with a very broad end that tapers to the handle, to those narrower ones that are of even width all the way to the point. The scimitar is also a

forerunner of the sable. *Crassula acinaciformis*, a succulent from the Baberton area, shows one of the most striking examples of an *acinaciform* leaf. The form in the project is made of Saligna (*Eucalyptus saligna*) with a centre of Zebrawood (*Dalbergia melanoxylon*).

👉 **A11**

ACINIFORM

A small, round bowl of Imbuia (*Phoebe porosa*) and Oregon Pine (*Thuja plicata*) contains eleven almond-shaped kernels made of Obeche (*Triplochiton scleroxylon*). The bowl, mounted on a rounded base with the word *aciniform* embossed in Braille on it, was made on Saturday, 16 January 1993. *Acinus* is the Latin term for a kernel, a seed, a stone or a berry growing in a cluster. *Aciniform* is linked to the likeness of kernels, but the Latin *acinus* can also be defined as berries, drupes or grapes. It is also the botanical name for such fruits or seeds. Their appearance as fleshy, clustered fruits, is indicated by the word *acinaceous* and is entered as such in the project. The word *aciniform* is more specifically derived from the plural of *acinus*, namely *acini* and it is to this plural sense that the *aciniform* kernels in the bowl allude. A slight movement may be detected if the kernels are softly touched.

👉 **A12**

ACROLITH

In ancient Greece, a kind of figurative sculpture was made with the trunk of wood and the head, hands and feet of stone. The wood was then either gilded or covered by metal drapery. This type of sculpture, practised as late as the 4th century BC, was called the *acrolith*. Examples of *acrolithes* did not survive and we only know about their existence from the descriptions of Pausanias, a 2nd century AD geographer and traveller. Phidias, one of the most famous Greek sculptors, is reported to have made such an *acrolith* of Athena at Platea. *Akros* in Greek is ‘apex’, ‘end’ or ‘extremity’, and *lithos* is ‘stone’, so *acrolithes* literally means ‘high stones’. The sculpture made for the blind project is not a figurative work, but it is an interpretation of the idea of an *acrolith* into a simplified conical shape, supporting a faceted, stone-like shape. The piece was completed on Monday, 8 March 1993. Laminated pieces of Tamboti (*Spirostachys africana*), Mahogany (*Swietenia macrophylla*) and Buffalo-thorn (*Ziziphus mucronata*) were used.

👉 **A13**

ACROMEGALY

A growth abnormality that results in excessively large hands, feet and facial features is called *agromegaly*. It is caused by an oversecretion of the somatotrophic hormone, that is the hormone secreted

by the pituitary gland to stimulate growth. Persons suffering from *acromegaly* appear dwarfed in relation to their large limbs and faces. The onset of the disease is very gradual. Because it is made visible through the enlargement of bone structures, osteoporosis, a softening sponginess of the bones is the result. In the flat relief sculpture made to depict a state of *acromegaly*, a homunculus or little man is shown. The largeness of his hands, feet and head in contrast to the smallness of the body makes the comical figure appear pathetically small. The Greek word *akron* denotes an extremity, something at the end and *megas* means ‘great’ or ‘large’. The cut-out profile of the figure is of Mahogany (*Swietenia macrophylla*) and it is mounted on a base of Oregon Pine (*Thuja plicata*).

👉 **A14**

ACROTOMOUS

Acrotomous is a term used in mineralogy that describes a cleavage or split parallel to the base. The shapes of minerals obey the rules of crystallography. In the sculpted model of the word, a faceted crystal was duplicated. One of the facets is made bigger than the others and serves as a base. The wooden crystal is cleanly cut through its length and the top piece is displaced sideways, in line with the base. *akros* is Greek for the top and *tomos* means ‘to cut’, hence the Greek verb *akrotomos* refers to the action of cutting the top off sharply or abruptly. To allude to the internal structural stresses found in crystals, the shape is composed of a number of geometrically aligned and laminated pieces of wood. They are Mahogany (*Swietenia macrophylla*), Imbuia (*Phoebe porosa*), Ironwood (*Olea capensis*), Blackwood (*Acacia melanoxylon*) and Rosewood (*Dalbergia stevensonii*). The original illustration was made on Tuesday, 19 January 1993, but because it did not adequately demonstrate the meaning of *acrotomous*, it was remade on 9 April 1994.

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👉 **A15**

ACTINOMORPHIC, ACTINOID, ACTINIFORM

Actinomorphic, *actinoid* and *actiniform* are all adjectives that indicate an appearance of rays being emitted. Although these words can also mean ‘star-like’, star-likeness is later more clearly described under *asteriated* or *asteroid*. The Greek *aktis* means ‘ray’, ‘beam’ or ‘related to the sun’, with *aktinedon*, the Greek adverb, pointing at a ray-likeness. *Actinism* is the radiation of heat or light and is generally studied under *actino*-chemistry, although *actinism* has also been developed into a branch of philosophy. Other *actinomorphic* forms with distinctly radially symmetrical appearances are sea anemones, the heads of dandelions, water sprinklers and fireworks exploding in the sky. *Actinomorphic*

halos and mandorlas are painted or sculpted around the heads and bodies of saints. As a symbol, an *actinomorphic* sun with symmetrical rays is well established on flags, emblems and heraldic charges. Half a sun symbolises dusk or dawn. A model suggesting a such setting or rising half-sun was made on Saturday, 9 January 1993 from Oregon Pine (*Thuja plicata*) and Imbuia (*Phoebe porosa*).

✎ **A16**

ACTINOPHOUS, ACTINODROMOUS

Shapes that bear radiating spines are *actinophorous*. In Greek, *aktis* is a 'ray', 'beam', or 'sun-relatedness'. The suffix *-phorous* is more properly used at the ends of words derived from Greek *phoros* that suggests an emanation or delivering, a kind of productiveness. The Latin-derived suffix for the same is *-ferous*. *Actinodromous* is used for animate shapes, like veins, that radiate or run from the centre. The *dromous* part is from the Greek, *dromos* that means 'running'. The sculpted form has a body of Kiaat (*Pterocarpus angolensis*), with pointed spikes of Poplar (*Populus* sp.) protruding from its head. It was made on Thursday, 21 January 1993 in reference to the radiated tentacles of sea-anemones. There are more than a thousand species of these fascinating invertebrates, all of the zoological order *actiniaria*. Anemones are sometimes referred to as *actiniae* or *actinias*. *Actinophorous* and *actinodromous* imply an active sense of beams emerging or running, whilst the words discussed under *actinomorphic* (which see) imply a more static or prevalent condition.

✎ **A17**

ACULEIFORM, ACULEOLATE, ACULEOUS

The sting of an insect is called an *aculeus* both in zoology and in Latin. This Latin word, however, more appropriately means 'little needle', from *acus*, or needle. Rose-thorns and the like are also referred to as *aculei*. The adjectives, *aculeiform*, *aculeolate* and *aculeous*, describe either the shape of sting like processes or the state of something that is beset with sting-like prickles. Alternatively, the shape of a small needle or the state of being covered with small needles is more aptly referred to as *aculeate* and has elsewhere in the BLIND ALPHABET PROJECT been interpreted as a cactus-like shape covered with rows of fine prickles. An *aculeiform* model resembling a scorpion's tail was made on Tuesday, 12 January 1993. The wood used for the *aculeus* itself is Imbuia (*Phoebe porosa*), and Meranti (*Shorea* sp.) makes up the segmented tail-part. The venom apparatus of the scorpion consists of a bulbous vesicle drawn out to a sharp, curved stinger. The venom is ejected by strong muscular contractions through an opening near the tip of the stinger. This paralyses the respiratory muscles and can cause cardiac failure.

✎ **A18**

ACULEATE

Shapes resembling very small prickles, or those that are beset with such small prickles are aptly described as *aculeate*. It is from the Latin, *aculeatus*, the adjective of *aculeus* or 'little needle'. *Acus* is Latin for 'needle' and *aciform*, *aciculiform* and *acicular* also derive from it. Of these, *aciculiform* (see under *aciform*) is the closest to *aculeate*, because, like *aculeate*, it is a diminutive of *acus*. Cacti, such as the prickly pear (*Opuntia* sp.), are truly *aculeate*. *Opuntia microdasys* is well known for its densely packed *aculeate* glochids or velvety cushions. *Microdasys* means 'minutely hairy' and the hardly visible spines of these glochids sting very effectively. Even the slightest touch of very hard skin picks up a hairy mass that smarts severely. The notorious, *aculeate* bristles of the stinging nettle (*Urtica urens*) are equally injurious. The cactus-form for the project was made on Thursday, 14 January 1993 from Douglas fir (*Pseudotsuga menziesii*) and has rows of small prickles of Poplar (*Populus* sp.). The vulnerable spines break easily and a protective box of Imbuia (*Phoebe porosa*) is fixed around the cactus.

✎ **A19**

ACUMINATE, ACUMINOSE, ACUMINATED

Acuminate, *acuminose* and *acuminated* mean 'tapering to a point' and are usually applied to some leaves. The scrambling Morning glory (*Ipomoea acuminata*) has such a leaf. The narrowing is usually applied to an apex bounded by lines or surfaces which change from being straight or convex to ones that are concave and converge to a point. *Acumen* is the Latin root, but in English *acumen* is normally used in a figurative sense. Speech is often pointed and full of *acumen*. Sharpness of wit and penetration of perception is evidence of *acumen*. Only rarely have shapes been designated as having *acumen*. They are better described by the adjectives *acuminate*, *acuminose* and *acuminated*. Three-dimensional *acuminate* tapering is also possible. The points of chisels and punches shaped in this way may greatly enhance their performance. The *acuminate* project-shape was made on Monday, 11 January 1993 from Blackwood (*Acacia melanoxylon*). To complement the shape, the wood of the White Syringa (*Kirkia acuminata*), indigenous to the north-eastern Transvaal, forms the base-block with the Braille inscription on it.

✎ **A20**

ADAXIAL

If it is understood that the Latin prefix *ad* means 'to', 'near to' or 'toward' and that the prefix *ab* means 'away from', then the difference in meaning between *abaxial* and *adaxial* becomes clear. The

adaxial side of a leaf is the upper side or the side turned towards the *axis* or stem of a plant. The lower surface of a leaf, that is the side facing away from the stem, is the *abaxial* surface. *Abaxial*, also meaning 'off-centeredness', is entered as the very first word in the BLIND ALPHABET PROJECT. The sculpted structure for *adaxial* has two parts, a slanting base with a cut-out leaf-shape fixed to it and a separate and loose leaf-shape that fits snugly into the cut-out on the base. The *abaxial* side of the loose leaf-form always faces the top. It is made up of *converginerved* (which see) facets that suggest veins. The midrib is made of black Zebra wood (*Dalbergia melanoxylon*), surrounded by Red Ivory (*Berchemia zeyheri*), with an unidentified wood, possibly Ramin (*Gonystylus* sp.), on the outside. The base part is made of Imbuia (*Phoebe porosa*). The structure was made on Saturday, 2 January 1993 in concert with *abaxial* and its definition.

👉 **A21**

ADDORSED, ADOSSÉ, ENDORSED, INDORSED

In heraldry, *addorsed* is the 'symmetrical placing back-to-back' of figures, beasts, birds, monsters, fishes, reptiles on shields and other charges. Other acceptable terms are *adossé*, *endorsed* and *indorsed*. The term *addorsed* is preferred in architecture where such figures are often found on capitals at the head of columns. One of the better known examples illustrating *addorsed*, is the placing of the wings of birds back to back. The Latin *dorsum* means 'back'. From this it is also clear that to *endorse* a cheque, a statement or anything else means to 'back' it. 'Backing' a cheque is therefore sensibly done on its reverse side. The shape made in aid of *addorsed*, shows a pair of wings lifted above the body of an eagle. The backs of the wings are nearly touching. This demonstration of flightiness was adapted from the national coat of arms of Mexico that contains such a symbol. The *addorsed* wings, mounted on a small base, were made on Tuesday, 27 April 1993 from Rhodesian Teak (*Baikiaea plurijuga*), Imbuia (*Phoebe porosa*), Kiaat (*Pterocarpus angolensis*) and Yellowwood (*Podocarpus* sp.).

👉 **A22**

ADENIFORM, ADENOID, ADENOUS, ADENOSE

Glands are swollen, bulbous organs without predetermined shapes. They are composed of nucleated cells and are either simple or complex in structure. Something that is *glandiform*, is therefore amorphously constituted, even if a specific type of gland is implied. The descriptive terms for glands, *adeniform*, *adenoid*, *adenous* or *adenose*, are therefore rather vague. *Adenoid* or *adenoidal* are adjectives that mean 'gland-like'. In turn, *adenoids*, the noun, denotes an overgrowth of the glandular tissue on the back of the upper part of the throat. The

Greek for gland is *adēna*. The study of glands is *adenology*. Bearing or producing glands is *adenophorous*. The Greek *phoros* suggests an emanation or a delivering, also a kind of productiveness. Generally, words are ended on *-ferous* which is procured from the Latin *phorus*. *Adenophyllous* points to the state of a gland-bearing leaf. A dissection of, or an incision into a gland is known as an *adenotomy*. A solid, globular, shape was guessed at in the interpretation of *adeniform*. The wood used is Jarrah (*Eucalyptus marginata*), and the date of completion, Thursday, 21 January 1993.

👉 **A23**

ADIPOSITIY, ADIPOSENESS, ADIPOUS

An *adipose* mixture is one containing amounts of *adeps* or animal fat. The Latin word *adipatus* points to animal fat as a substance. Fatness in the sense of obesity as a state of being is more correctly referred to by the nouns *adiposity* and *adiposeness* and the adjective *adipous*, all words derived from *adipose*. *Adipescient* indicates both the increase of fat as a substance or the increase in the size of a person to obesity. For the project, an over-sized woman illustrates *adiposeness*. In earlier times *adiposity* was viewed as a virtue in the make-up of womanhood. The Venus of Willendorf, a small, ancient carving from the Palaeolithic Age, shows a woman with excessively heavy breasts and abdomen. This mother-earth goddess is about twenty-five thousand years old and is thought to have been used as a charm to ensure fertility. In honour of the fertility goddess, an impression of a similarly obese woman was made from Kiaat (*Pterocarpus angolensis*) on Friday, 22 January 1993. The figurine stands on a round base of Rhodesian Teak (*Baikiaea plurijuga*) that contains the inscription in Braille.

👉 **A24**

ADNATE, ADNASCENT, ADNASCENCE

A thick, wooden shape suggesting a petal was sculpted with a stamen-like stalk attached to it for most of its length. The way two these two surfaces are congenitally bonded together is called *adnascence*. The brightly coloured bracts on a *Bougainvillea* are not its true flowers. The real flowers are inside the colourful bracts. These small, white inflorescences have their stalks *adnascently* attached to the inside surfaces of their host bracts. *Adnate* and *adnascence* come from the Latin *natus* that means 'born' or 'created' and from the prefix *ad* that means 'to' or 'near to'. *Adnate* or *adnascent* surfaces are always dissimilar, such as the separate surfaces of stamens and petals. The process only applies to the unexpected bonding or growing together of surfaces in nature and the terms are used mostly by botanists and physiologists. The *adnascent* model was made on Friday, 2 April 1993.

The thick petal is of Tamboti (*Spirostachys africana*), the stamen-stalk of Rhodesian Teak (*Baikiaea plurijuga*). The pollen-bearing anther at the end of the stamen is of Zebrawood (*Dalbergia melanoxylon*).

👉 **A25**

ADORAL

Adoral describes locations in relation to the mouth. Bits of anatomy, injuries or other particulars situated at or near the mouth are in an *adoral* position. The model shows a replica of the human mouth with a pair of stylish lips. An *adorally* placed, solid beauty-spot graces the upper lip. Although the model is of a human mouth, the word is mostly employed in a zoological sense. The Latin for mouth is *or* and with the prefix *ad*, meaning 'to', 'near to' or 'toward', the word *adoral* was formed. In contradistinction to *adoral*, *aboral* pertains to a position away from the mouth. The noses of cats and other animal species are in an *adoral* position. The split between a cat's nose and mouth almost unites the two organs. Animals can also have *aboral* noses. The orang-utan has a large blank space between its little nose and mouth. The nose is higher-up on its face, close to the eyes. The model was completed on Saturday, 23 January, 1993. The lips are made of Jacaranda (*Jacaranda mimosifolia*) and the 'beauty-spot' of Poplar (*Populus* sp.).

👉 **A26**

ADROSTRAL

Adrostral things pertain to the beaks or snouts of animals, more specifically, a position occupied at or near the beak or snout is an *adrostral* one. One might speak of the *adrostral* feathers of a bird as opposed to the primary or secondary wing-feathers. This zoological term comes from the Latin *rostrum* or 'beak' and from the prefix *ad* that means 'to' or 'near to'. *Rostrum* is still used in zoology to denote beaks and some snouts as distinctly different from proboscides and noses. *Rostrum* does not apply to a bill, but it is not certain exactly where the bills end and the beaks begin. Beak-bearing birds and animals are *rostriferous* or *rostrate*. The sculpture shows the long beak of a bird with a foreign knife-like object slicing through it in an *adrostral* position. It is made of Wild Olive (*Olea europaea*, subspecies *africana*) and the knife-like object of Rhodesian Teak (*Baikiaea plurijuga*). The work was completed on Monday, 25 January 1993.

👉 **A27**

ADUNCOUS, ADUNC, ADUNCATE

A replica of a large mechanical hook such as the ones used in block-and-tackle devices, serves to illustrate the meaning of the words *aduncous*, *adunc* and *aduncate*. *Aduncous* and *adunc* are adjectives that mean 'bent as a hook' or 'hookedness'. The verb *aduncate* describes the action or appearance of

curving inward. The noun *aduncity* is now very seldom, if ever used. The origin of the word lies with the Latin *uncus* which means 'hook'. Thorns such as those found on roses, Acacias and Buffalo Thoms are *adunc*. So also are the stings of scorpions and the claws of cats, eagles, hawks, bears and other animals. There is a resemblance between the Latin *uncus* for 'hook' and *unguis* for 'claw', but no relation between the etymology of the words described here and *unguis* could be established. The hook was made of Brown Ivory (*Berchemia discolor*) and a small bolt and nut unit of Imbuia (*Phoebe porosa*) was attached for effect. The date of completion is Tuesday, 26 January 1993.

👉 **A28**

ADVENTITIOUS

Adventitious, as morphological nomenclature, means 'appearing in an abnormal or unusual position' or 'growing from an unexpected place'. Roots can, for example, be seen to grow higher up on a stem or directly from a leaf. Other meanings linked to *adventitious* are: 'accidental', 'extraneous', 'supervenient', 'accidental' and 'casual'. The Latin *adventus* means 'arrival'. *Adventive* is not a morphological concept, and is more properly employed to mean 'not indigenous or thoroughly naturalised', although *adventitious* can also mean these things. *Adventitious* in a legal sense points to the fortunes or misfortunes falling to a man by coincidence or from a stranger. Examples of *adventitious* phenomena can be found by looking for things that appear casual in unusual places. The thick leaf of the Adromischus succulent (*Crassulaceae*) was sculpted with its unusual rooting near the base of the leaf. The roots are made Kiaat (*Pterocarpus angolensis*), and the rest of the shape of Beefwood (*Casuarina cunninghamia*) and Pau Marfim (*Balfourodendron riedelianum*). The piece was completed on Saturday, 3 April 1993.

👉 **A29**

ADVERSIFOLIATE, ADVERSIFOLIUS

Leaves that are placed opposite to each other on a stem can be called *adversifoliate* or *adversifolious*. In Latin, *adversus* means 'the opposite of', 'in opposition to' or 'against'. It also means 'from the front' in the sense of a wind or an enemy that approaches head-on. *Folium* is 'a plant-leaf'. *Adversus* was once used to indicate the position of plant parts that point directly to, or away from a particular place. So could the radicle or that part of the plant embryo that develops into a root be in a position *adversus* to the hilum or the point of attachment of the seed to the seed-vessel. The project-piece shows a rectangular vignette-like frame that contains the cut-out profile of an *adversifoliate* twig. It was made on Wednesday, 27 January 1993 from two laminated boards of Imbuia (*Phoebe porosa*) and Iroko (*Chlorophora excelsa*).

The two thin boards are glued down in such a way that their grains cross each other. This adds strength so that the slender petioles of the leaves will not easily snap.

A30

AFFRONTÉE, AFFRONTY, AFFRONTÉ, AFFRONTED

Affrontee and *affronty* are the more often used heraldic terms for 'facing the observer' or 'looking frontwise'. The French word from which they come is *affronté*. It too is used in English heraldry, but not as frequently. In architecture, *affronted* applies to two figures, usually animals, placed symmetrically facing each other. They are often found on the capitals at the head of columns. The crest of Scotland is a lion *affronty*. The carving shows a roundel with an heraldic lion in the *sejant affronty* position, that is the 'seated and facing the front' position. The normal English word *affront* implies that an instigator is 'confronting' or 'facing in defiance'. An *affront* has the added impact of open insult to the face. This is not necessarily lost in the heraldic *affrontee* positions, but it is not specifically mentioned in reference books. The disc is made of Mahogany (*Swietenia macrophylla*), and the lion consists of carved and inlaid pieces of Zebrawood (*Dalbergia melanoxylon*), Red Ivory (*Berchemia zeyheri*) and Rhodesian Teak (*Baikiaea plurijuga*). It was undertaken on Wednesday, 28 April 1993.

A31

AGLET, AIGLET, AIGUILLETTE, AIGUILLETED

Aglets, or *aiglets*, commonly denote the metal tags on shoelaces. As such the words do not really carry morphological relevance. At first the fascination for the fact that there could be a special name for such apparently trivial items as the tips of shoelaces helped *aglet* and *aiglet* to find their way into the BLIND ALPHABET PROJECT. It was later discovered that any metallic tag, pendant or spangle worn as an ornament on the dress can be an *aglet* or *aiglet*. *Aiguillette* is specifically used for dress-ornamentation. Edmund Spenser (1552 to 1599) wrote of such *aiguilleted* embellishment as 'golden *aygulets*, that glistened bright.' Because of their metallic shine and shape, the catkins of willows and hazels can also be called *aglets* or *aiglets*. The words derive through the older English *aygulet* from the French *aiguillette* which is the diminutive of *aiguille* (refer to *aiguillesque*). *Aiguille* in turn comes from the Latin *acicula* (see *aciculate*), which is the diminutive of *acus* or needle. Two relief *aiglets* were carved on Thursday, 28 January 1993 in Burmese Teak (*Tectona grandis*) on the ends of a twisted shoelace.

A32

AGUISÉE, AGUISÉ, AIGUISE

The French verb *aiguiser* means 'to sharpen'. In heraldry, some crosses are depicted as having sharpened ends. This is done to compare the cross to a sharp and pointed sword. Such a sword is metaphorically depicted in the Bible, in Hebrews 4:12, to illustrate the penetrating power of the word of God. 'For the word of God is quick, and powerful, and sharper than any two-edged sword, piercing even to the dividing asunder of soul and spirit, and of the joints and marrow, and is a discerner of the thoughts and intents of the heart.' A sharply pointed cross is properly blazoned as *crux aguisée*. To 'blazon' is to describe heraldically correct. *Aguisée*, *aguisé* and *aiguise* the heraldic terms for pointed, can also be employed for any other item with sharp endings. However, more common heraldic terms for sharp-endedness are *urdy* or *urdé*. The piece for the BLIND ALPHABET PROJECT is a cross with its square members ending in pyramidal points. It was made on Thursday, 22 April 1993 of Leadwood (*Combretum imberbe*) and Wild Olive (*Olea europaea* subspecies *africana*).

A33

AGRAFES, AGRAFFE

An *agrafes*, also spelt *agraffe*, is a wire cage that holds the champagne cork in place. It can also be a clasping hook that fastens to a ring. An *agrafes* can be found holding down the lid of a canned fruit bottle, and as the buckle of a belt. The French verb *agrafer* means 'to hook'. Another English word for the same thing is *coiffe*, or *coif*. When these foreign words were first encountered, it was realised that they describe a specific wire object, rather than an ideal morphological shape. However, partly because of their strange reconditeness, and partly because they issued a challenge to turn wood into impossible thin winding and clasping forms, they found their way into the BLIND ALPHABET PROJECT. The *agrafes* was interpreted as a simplified clasp with geometric bends made of Pau Marfim (*Balfourodendron riedelianum*). It hinges in two places, once where it is attached to a solid base of Imbuia (*Phoebe porosa*) and Merbau (*Intsia* sp.), and again further along its own length. As it clamps into position, it pretends to keep a large cylindrical cap, made of Kiaat (*Pterocarpus angolensis*), in place. The construction was completed on Friday, 29 January 1993.

A34

AIGUILLESQUE

The English borrowed the word *aiguille* unchanged from the French. In French it is more properly used for 'needle' and as such it has a number of wider applications. The diminutive of *aiguille*, *aiguillette* (refer to *aglet*) is more specifically used in English for dress-ornamentation. *Aiguillette* derives, through French, from the Latin *acicula* (see *aciculate*), the diminutive of *acus* or needle. In English, *aiguille* is

only used as a mountaineering term for steeply pointed mountain peaks in cold regions. *Aiguilles* result from the expansion of ice as it freezes in rock joints, and from its contracting as it thaws. The stresses split the rock into needle-shaped peaks. Scree deposits of broken fragments amass in the lower slopes of such mountains. Stac Polly in Wester Ross, Scotland, is one of the best examples. *Aiguillesque*, the adjective, describes mountains and other objects that have needle-shaped peaks. The shape for the BLIND ALPHABET PROJECT shows a few *aiguillesque* spires that combine into a larger composite *aguille*. It was completed on Tuesday, 2 February 1993 from Rhodesian Teak (*Baikiaea plurijuga*).

👉 **A35**

AISLÉ

Aislé is the heraldic term for ‘winged’. Church passages, divisions or transepts are known as *aisles*. The heraldic *aislé* is more expressly descriptive of wings, wings that are illustratively employed to suggest flight or the ability to fly. Crests are often depicted between two wings. In such cases the wings are sometimes shown *addorsed* (which see) and sometimes displayed. The word derives from the Latin *alæ* that means ‘wings’. The closest word to *aislé* in French is *aisselle*. The sources consulted, report it to mean ‘armpit’! Armpits are of course in the region where birds might sport their wings, but the connection seemed exaggerated until it was discovered that *alar* as a physiological term (which see) means, among other things, *axillary*. *Axilla* is a more proper word for an armpit. For the project, two wings were made of Imbuia (*Phoebe porosa*). To add to the idea of motion and swiftness, two wing-tip pieces of Karee (*Rhus lancea*) were added. The wings were attached to a wheel and mounted on a base. The base and wheel are made of Kiaat (*Pterocarpus angolensis*). The structure was completed on Friday, 30 April 1993.



👉 **A36**

ALATE, ALATED, ALATION, ALAE

Wind very effectively distributes seeds that are light and of a flighty structure. Leadwood (*Combretum imberbe*) is often used in this project. The seed capsules of all *Combretum* trees and shrubs are supported by four papery ‘wings’ so that the wind can propel them along the ground. The wood most frequently used in the project, Kiaat or *Pterocarpus angolensis*, has a light, *aciculate* (which see) fruit, surrounded by a large papery wing. *Pterocarpus*, from Greek, literally means ‘winged fruit’. In 1668 such a winged condition was first described as *alate*. It means ‘having wings or wing-like appendages’. A variety of *alate* is *alated*. *Alation* also means ‘a winged condition’, but it is further used for the way insects shed their wings. The Latin for wing is *alatus*

and its plural, *alæ* is still used zoologically. *Aliform*, *alar* and *alary* (refer to *aliform*) all indicate a wing-shapedness or a wing-likeness. See also the heraldic term *aislé*. The resemblance of a winged *Combretum* seed was made on Saturday, 30 January. The seed-centre is of Blackwood (*Acacia melanoxylon*) and the four wings are of Rhodesian Teak (*Baikiaea plurijuga*).

👉 **A37**

ALEATORY, ALEATORIC

Chance as a serious device in aiding high art was firmly established in 1916 by Jean Hans Arp (1887 to 1966) in his work ‘Collage with Squares Arranged According to the Laws of Chance’. In this work, Arp randomised rectangularly torn shapes onto a base. An exact copy was made to scale for the BLIND ALPHABET PROJECT on Wednesday, 3 February 1993. The ten smooth blocks of Imbuia (*Phoebe porosa*) suggest the black shapes, and the five pinned blocks of Pine (*Pinus* sp.) the white ones. They are all fixed on a base of Meranti (*Shorea* sp.). Coincidental means of composing is scholarly referred to as *aleatory* or *aleatoric*. Since the pioneering work by Arp, *aleatoric*, random or intermediate procedures have been extensively used in writing, music, dance and many other art forms. The word *aleatoric* came into being in 1693 and it literally means ‘dependent on the throw of a dice’. The Latin for ‘dice’ or ‘chance’ is *alea*, with *aleatorius* derived from it. Anything that is dependent on uncertain contingencies can be called *aleatory* or *aleatoric*. So can, for example, *aleatory* contracts be drawn up.

👉 **A38**

ALEMBICATED, ALEMBIC

An *alembic* is a contraption formerly used in distilling. It consists of a gourd-shaped vessel, gear and beak. The beak or cap is the *alembic* proper where the brewed substance condenses into a distilled alcoholic liquid, further to be drained into a receiver. *Alembicated* pertains to the shape or characteristics of an *alembic*. In Arabian, *al* means ‘the’ and an *anbiq* is ‘a still’. The Greek *ambik* or *ambix* is a kind of cup. *alembicated* is used figuratively to describe, for example, the kind of writing that is overly purified and distilled. Edmund Burke (1729 to 1797) saw it as the significant social result of national turmoil. He wrote about ‘the hot spirit drawn out of the *alembic* of hell which in France is now so furiously boiling.’ The shape made for the project shows a still such as that found in the old-fashioned home industry brewing of alcoholic beverages. It is made of laminated bands of Jelutong (*Dyera costulata*), Mahogany (*Swietenia macrophylla*) and Kiaat (*Pterocarpus angolensis*). The piece came into being on Thursday, 4 February 1993.

👉 **A39**

ALIFORM, ALAR, ALARY

In the 1830's *aliform* and *alar* were defined to mean wing-shaped or wing-like. Later, in 1847, the definition was extended to include 'of or belonging to wings'. *Alary* is a variety of *alar*. The three words come from the plural for 'wings' in Latin, namely *alæ*. *Alarus* is Latin for a single wing. In botany and in physiology *alar* also means *axillary* or 'of the armpit'. *Axillary* is the adjective for two words, *axil* and *axilla*. An *axil* is the upper angle between a leaf and the stem on which it sits, or between a branch and the trunk from which it grows. An *axilla* is an armpit. *Axilla* is also the Latin for armpit, where it is formed as the diminutive of *axula*. *Axula* in turn, is designated as the *axis* from which the *alæ* or wings pivot. The French for 'armpit' is *aisselle* (see *aislé*), also derived from *alæ*. For the project, a simplified, outstretched wing of a bird in flight was made on Monday, 1 February 1993 from Mahogany (*Swietenia macrophylla*).

👉 **A40**

ALISÉ PATÉE, ALISEE PATÉE

Some authors state that there are over three hundred shapes of the cross. *Alisé* or *alisee* are heraldic words for 'rounded'. They usually describe the ends of the traverses of specific crosses. Such crosses are then correctly blazoned (described in heraldic terms) as *alisee patée*. *Patée* or *paty* is an older heraldic way of indicating the general form of the cross as spreading in all directions, also referred to as the *cross formy*. *Patée* is derived from the Latin *patulus* which means, 'wide open', 'extensive', or from *patere* that signifies something 'to be open. In English, *patulence* aptly expresses such an outward spreading. The shape of the *crux alisee patée* is therefore symbolic of the extent to which the cross can reach, or be reached. It is open to all. The rounded ends suggest that its influence is immeasurable, and all-encompassing in reference to Ephesians 3:18: '... comprehend with all saints what is the breadth and length, and depth, and height; and to know the love of Christ which passeth knowledge ...'. The project-shape shows a *crux alisee patée*, made of Burmese Teak (*Tectona grandis*) on Wednesday, 21 April, 1993.

👉 **A41**

ALLANTOID

The word *allantoid* is used to describe forms that are sausage-shaped. *Allas* is the Greek for 'a sausage' and *eidos* stands for 'form'. In Greek, the declension of *eidos* into *oeides* and *eides* alters the meaning to 'having the form of' or 'like'. Words with the suffix *-oid* added are largely used in scientific terms. *Actinoid*, *adenoid* and *ancistroid* are some used in the BLIND ALPHABET PROJECT. *Allantoid* has its widest application in physiology where it pertains to the *allantois* or fetal

membrane. This obstetric term is found only in reference to mammals birds and reptiles. It was originally named after the sausage-like fleece and form found attached to the foetus of a calf. An *allantois* lies under the chorion or fetal sac (refer to *choroid*), and forms a means of communication between the foetal and maternal blood. *Allantoidian*, a zoological adjective, means 'having the foetus furnished with an *allantois*'. The Sausage Tree (*Kigelia africana*) derives its name from its *allantoid* fruit. The fruit was sculpted for the project out of Leadwood (*Combretum imberbe*) on Friday, 5 February 1993.

👉 **A42**

ALLIACEOUS

In 1792 *alliaceous* was first used to describe the form, taste or smell of garlic. Later it was mistakenly also applied to onions. The word was taken from the Latin for garlic, namely *allium* or *alium*. Common garlic, of the lily family of plants, is botanically known as *Allium sativa*. A bulb of common garlic, with its bulblets or cloves in a papery, membranous skin was made for the BLIND ALPHABET PROJECT on Saturday, 6 February 1993 out of Tamboti (*Spirostachys africana*). The outer membrane can enclose up to twenty cloves and their shapes are, although vaguely softened under the membrane, still detectable to touch and sight. The onion goes by the botanical name of *Allium cepa*. It bears the generic name *allium* only because it belongs to the immediate family of the garlic. Its real name in Latin was *caepa* or *cepa* and this was later used as the specific designation in its botanical name. Refer to *cepaceous* for a proper discussion on 'onion-shaped'.

👉 **A43**

AMBS-ACE

The lowest throw at dice is a one. A throw of two ones is an *ambs-ace*. Gamblers call this throw 'the snake's eyes on dice' because it 'stares' at them like an evil snake. As a gambling term for 'next to nothing', it was first recorded in 1679. Since then, it has been employed in a more general and figurative sense for 'bad luck', 'worthlessness' and 'misfortune'. In Latin, *ambo* means 'both'. *Ace* means 'as' or 'said to be'. In Greek *eis* is 'one'. *Ambs-ace* literally means 'both ace' or 'double ace'. The term found its way into the BLIND ALPHABET PROJECT because it so graphically depicts a coincidental effect dependent on the structure of dice. The two sides facing down are sixes. Six plus one is seven. The numbers on opposite sides of a dice will always add up to seven. The three is opposite the four and the two is opposite the five. Perhaps that is why seven is regarded as such a lucky number. For the *project*, a pair of dice in the *ambs-ace* position was made of Kiaat (*Pterocarpus angolensis*) and located on a base of

Imbuia (*Phoebe porosa*). The date of completion is Monday, 8 February 1993.

👉 **A44**

AMENTIFORM, AMENTACEOUS

Willows, birches, hazels, alders and other trees have cylindrical male or female inflorescences called catkins. Catkins are usually of a grey downy or silky texture and hang on slender stalks. The botanical term for a catkin is *ament*. Sometimes the Latin *amentum* is also used. *Amentiform* describes things, usually growth forms, that are not true catkins, but that are shaped like catkins. Usually fruit seeds, and husks can be *amentiform*. *Amentaceous* describes the nature or shape of catkins, but can also refer to the bearing of catkins. *Amentiferous* and *amental* only points to the ability of trees to bear catkins. *Amental* in another sense means 'denying or dispensing with the existence of mind' and as such has nothing to do with catkins. The generalised form of a catkin was made for the BLIND ALPHABET PROJECT out of loose segments that move about to some extent. This composite shape was constructed in Jelutong (*Dyera costulata*) on Tuesday, 9 February 1993.

👉 **A45**

AMPHICELIAN, AMPHICÆLOUS

Amphicælian is a physiological term for 'concave on both sides'. Sometimes *amphicæulous* is used. The terms are mostly applied to vertebrae that are double concave. The Greek root *koilos* means 'hollow', 'hollowed' or 'a cavity'. Furthermore, a *koilia* in Greek is a 'belly'. *Amphi* in Greek means 'both sides', 'both kinds' or 'around'. It is not to be confused with the Greek *peri*, which only means 'all round'. The declension of *amphi* into *ampho* changes its meaning into 'dual' and 'also'. *Ampho* corresponds with the Latin *ambo* or 'both'. The word *concavo-concave* (which see) describes the same condition of a hollow on both sides. Its application, however, is more in the field of optometry, in the shape of optical lenses. The project-form is a hand-shaped disk, made of Tamboti, (*Spirostachys africana*). Its two sides are shallowly hollowed out. Accent lines of Jelutong (*Dyera costulata*) are inserted in the surfaces of the two hollows. The slight unevenness of surface is an allusion to the unevenness of the shape of a vertebra. It was made on Wednesday, 10 February 1993.

👉 **A46**

AMPHIPTÈRE

An *amphiptère* is a winged serpent in heraldry. Information regarding the exact form of the *amphiptère* could not be found. However, all fabulous creatures are classified as monsters in heraldry. In biology, monsters are human or animal beings that display growth abnormalities. The science of monsters whether in biology, mythology

or heraldry, is called *teratology*, derived from the Greek, *teratos* or 'monster'. In Greek, *amphi* means 'around', 'about' or 'both sides'. *Pteron* is the Greek for a 'wing' or for 'an array of feathers'. The prefix *amphi-* can either indicate that the serpent has a wing on each of its 'shoulders', or that the serpent, when coiled-up, assumes a circuitous position. The sculpture shows both. The curled-up and entwined snake is made of Kiaat (*Pterocarpus angolensis*), and the pair of wings of Imbuia (*Phoebe porosa*). The heraldic terms for serpents when coiled so as to form a circle are *encircled*, *voluted* or *involved*. The pair of wings can also be blazoned (heraldically described) as *aislé* (which see). The *amphiptère* was made and on Thursday, 29 April 1993.

👉 **A47**

AMPLEXIFOLIATE, AMPLEXICAUL, AMPLEXICAULINE, AMPLEXATION

The model shows how an *amplexifoliate* leaf, that is, one clasping the stem from which it comes. Both leaf and stem are truncated so that the aspect of embracing can be brought strongly to the focus of attention. *Amplexifoliate* is only possible for sessile, that is stalkless, leaves. The manner in which leaves of lilies and reeds enfold their stems is called *sheathing*. *Amplexus* is the Latin for 'encircling', 'embracing', 'clasping', 'girth' and 'hugging'. *Terrarium amplexus*, for example, means 'the full extent or circumference of the earth'. Another term for stem-clasping leaves, *amplexicaul*, or its variation, *amplexicauline*, comes from the Latin *caulis* or 'stem'. *Semi-amplexicaul*, or half-stem-clasping, leaves are also possible. An older English word, *amplexation*, means 'an embracing'. *Amplexation* is especially used for a surgical method of treating some bone-fractures. The leaf-part of the model is made of Kiaat (*Pterocarpus angolensis*) and the stem of Meranti (*Shorea* sp.). It was completed on Thursday, 11 February 1993.

👉 **A48**

AMPULLIFORM, AMPULLACEOUS, AMPULLATE, AMPULLATED, AMPULLAR, AMPULLARY

Ampulliform or 'bottle-shaped' is taken from the ancient *ampulla*, a small, two-handled globular flask or bottle. In Latin, *ampulla* is the diminutive of *amphora*. Several morphological words all meaning the same thing, are derived from *ampulla*. *Ampullaceous*, *ampullar*, *ampullary*, *ampullate* and *ampullated*, all apply to bulging, bellied or inflated shapes belonging to fruit, blood vessels, roots or glands. The shapely forms of the distended trunks of the Madagascar Baobabs (*Adansonia* sp.), cacti and succulents are truly *ampullaceous*. The specific name of the grotesque Bottle Palm (*Hyophorbe lagenicaulis*) comes from the Latin *lagoena*, an eared flask with a narrow neck. *Ampullosity* is rarely used, but always in a figurative sense for inflated

inanity and bombast. *Ampullosity* is the characteristic trademark of turgid politicians. For the 'blind' project, a primitive *ampullaceous* shape, like the ancient *ampulla*, but without the handles, was made of Jarrah (*Eucalyptus marginata*) on Friday, 12 February 1993.

👉 **A49**

ANADEM

In ancient Greece, wreaths, or *anadems*, usually made of olive, pine, laurel, celery or palm, were awarded to athletes victorious in the Olympic Games and as prizes to poets and orators. Young lovers hung wreaths over their suitors' doorways as a sign of affection. The Romans also awarded laurel crowns as a mark of honour, especially to civil officials and returning warriors. The favourite material for the Roman *anadem* was laurel. The laurel wreath is worn as two spikes of woven branchlets. These are bound together at the back of the head from where it circles half-way around the head to the temples. The *anadem* did not cover the forehead. The word *anadem* is today applied to other forms of floral decoration like chaplets and garlands. *Anadem* is derived from the Latin *anadema* through the Greek *anadeein*, where it meant specifically 'a headband'. Michael Drayton (1563 to 1631), an English poet, famous for his Horatian odes, wrote of the '*anadems* of flowers.' A wooden model of a Roman laurel wreath, made to fit onto a slightly-above average size head, was completed on Saturday, 13 February 1993. It consists of nine different kinds of wood.

👉 **A50**

ANAGLYPTIC, ANAGLYPIC, ANAGLYPH

An *anaglyph* is an ornament or ornamental carving in low relief. *Anaglyptic* carving is usually found on coins and medals. Firstly, a prototype-carving is made on a surface by embossing, chasing, gouging or modelling. This much larger *anaglyph* helps the artist to work more accurately and to achieve the highest clarity of detail possible. An *anaglyptograph* machine aids the work on the larger carving, but its main function is to reduce the prototype in size to the dimensions prescribed for the particular coin, or medallion. The art of producing low-relief carving is known as *anaglyptography*. *Ana-* is the Greek prefix for 'up' or 'raised' and *glypho* means 'to carve'. A *glyptes* is a 'carver' or 'sculptor'. For the project, a section of the carving found on the back of an antique English chair was duplicated in Jacaranda (*Jacaranda mimosifolia*). This *anaglyptic* carving shows the wind, personified as the face of a mythical being with gusts billowing from his mouth and was completed on Monday, 15 February 1993.

👉 **A51**

ANASTOMOSIS, ANASTOMOSE

A model of two main blood-vessels with a few interconnecting veins illustrates the word *anastomosis*. Although *anastomosis* has come to mean 'an irregular network', it originated as a term for the intercommunication between only two vessels by a connecting cross-branch. The Greek *stoma* for 'mouth' indicates that the emphasis is on a 'mouthing into'. The juncture of streams, channels or branches. is easily viewed from a distance and *anastomosis* was originally applied to the minute cross-connections between arteries such as can be viewed objectively. However, all of these can also be viewed internally. The way underground railway channels, streets, large sewerage pipes and the passages of caves *anastomose* can be experienced from an inside position. *Inosculate*, from *os*, the Latin for 'mouth', also pertains to the manner in which hollow channels open into each other, or to how solids interpenetrate. An *anastomotic* is an agency or medicine designed to open the mouths of vessels or arteries. The sculpting on the piece was done on Wednesday, 31 March 1993 in Jarrah (*Eucalyptus marginata*).

👉 **A52**

ANCIPITAL, ANCIPITATE, ANCIPITOUS,

Ancipital, *ancipitate* and *ancipitous* mean 'having two sharp edges'. In Latin, *anceps* is the word for 'two-headed' and it comes from *ambi* for 'both' and *cipit* for 'heads'. The Latin *ancipit* therefore also means 'two heads' and its singular, *caput* is one 'head'. A 'head' as the seat of reason and foremost part of the body can indirectly imply many other actions or objects. It finds itself in wordings such as 'to head somewhere', 'headings', 'heady' and 'head or tail'. *Anceps* or 'two-headed', can likewise mean 'two-sided', 'double-sided' or 'undecidedly faltering between two points'. In the case of *ancipital*, it means 'two-edged' or 'double-edged'. Swords can be 'double-edged' and from this, *anceps* evolved into the further indirect meaning of 'dangerous'. An *ancipitous* leaf has two sharp edges. For the project, a structure was invented that has the two sharp edges on two rounded forms, vaguely resembling heads. It looks somewhat like a double-headed clam or like castanets and was made of Beefwood (*Casuarina cunninghamia*), on Tuesday, 16 February.

👉 **A53**

ANCISTROID

Ancistroid is 'hook-shaped'. The word was formed in 1879 from the Greek *agkistrion* that means a 'fish hook' or a 'spindle hook'. *Agkistrion* is the Greek diminutive, meaning 'little hook'. There *agkistrómai* indicates that something is furnished with barbs and *agkistro-detos* indicates the presence of a hook. In English, the suffix *-oid* in *ancistroid* is from the Greek *eidos* that means 'form'. The declension of *eidos* into *oeides* and *eides* gives it the

new meaning of 'having the form of', or 'like'. Words with the suffix *-oid* added are largely used in scientific terms such as *actinoid*, *adenoid* and *allantoid* (which see). Also refer to the words *aduncous*, *adunc* and *aduncate*. They originate in Latin and mean very much the same as *ancistroid*. A shape resembling a fishhook was made from an extremely hard wood, Brown Ivory (*Berchemia discolor*), so that the cross-grain on the thin curve of the shape will not snap easily. The piece was completed on Wednesday, 17 February 1993.

👉 **A54**

ANCRÉ, ANCYROID, ANCORAL

Ancyroid describes physiological processes that are *anchor*-shaped. Examples are the *coracoid* process (which see) of the scapula and the middle cornu of the lateral ventricle of the brain. *Ancoral* pertains to zoological phenomena like the anchor-shaped feet of some parasitic crustacea. The Greek for 'anchor' is *agkura* and in Latin it is *ancora*. In heraldry the anchor is a prominent symbol in the design of the cross. It stands for stability, trustworthiness and safety in the face of onslaughts. There it is termed *ancré*, *anchored* or *anchory*. In keeping with the aim of the BLIND ALPHABET PROJECT, only abstruse words qualify. Because the meaning of *anchored* and *anchory* could be too easily guessed at, they were left out. The project-shape is of a *crux ancré*, made in Kiaat (*Pterocarpus angolensis*) on Thursday, 18 February 1993. The stock or the anchor's cross-bar is of *Saligna* (*Eucalyptus saligna*) and the pointed grapple-holds at the base of the anchor are its 'flutes'. In non-heraldic English, *ancyroid* and *ancoral* also seem to describe the shape of the cross and as a result they too are written on it on it.

👉 **A55**

ANGUILLIFORM

The eel comprises of more than 500 species of fish from the order *anguilliformes*. *Anguilliform* or 'eel-shaped' comes from *anguilla*, the Latin for 'an eel'. In Latin, *anguilla* is also the diminutive of *anguis* or 'snake'. Eels are slender, elongated, usually scaleless fish with long dorsal and anal fins that are conspicuous around the tail tips. They can be found in all seas and also in selected fresh waters. Some eels can grow up to 1.8 metres long. The difference between the male and female is remarkable. The female European eel (*Anguilla anguilla*) reaches a length of about 1.5 metres, but the male only grows up to forty centimetres. The smallest eel-like creatures include the *anguillule* of the order *anguillulidae*. These little eels are so small that they make their living in sour paste or vinegar. An *anguilliform* object was made of Kiaat (*Pterocarpus angolensis*) on Saturday, 20 February 1993. This abstraction has the long and thin twists of an eel as it turns in water.

👉 **A56**

ANGUINE, ANGUIFORM, ANGUINOUS

In Latin, *anguis* means a 'snake'. *Anguine*, a term for 'resembling a snake or serpent and *anguiform*, for 'snake-shaped', are derived from *anguis*. Sir Isaac Newton (1634 to 1727) used *anguinous* in 1656 to give the name *Anguinous hyperbola* to one of his mathematical inventions. *Anguinous* is derived from the Latin *anguineus* where it also means 'snake like'. The nature of Newton's circuitous hyperbola indicates that he was clearly inspired by the windings of a snake. Apart from its use in the *Anguinous hyperbola*, the word *anguinous* today very rarely applies. Another word for 'snake-like' is *colubrine* (which see). The *colubers* are a specific genus of ring-necked snakes and *colubrine* is therefore not used as generally as *anguinous* or *anguiform*. For the BLIND ALPHABET PROJECT the bunched-up coils of an Egyptian cobra was carved out of Kiaat (*Pterocarpus angolensis*). The marks of the chisel were left on the form to suggest scales. The snake is mounted on a base of *Imbuia* (*Phoebe porosa*). The work was completed on Friday, 19 February.

👉 **A57**

ANGUSTATE, ANGUSTOUS, ANGUSTA-TION

The *angustate* shape in the BLIND ALPHABET PROJECT is made of *Tamboti* (*Spirostachys africana*) and is an interpretation of the narrow leaf of the Firethorn (*Pyracantha angustifolia*). *Angustate* means 'narrowed' and applies mainly to the forms of leaves, especially to narrowed contractions at their bases. *Angustation* is the verb that indicates the act or process of contraction and can also be applied in a more three-dimensional sense than *angustate* or *angustous*. *Angustare* is the Latin verb that means 'to make narrow'. *Angustifoliate* means 'narrow-leaved' and *angustirostrate* 'narrow-beaked'. It is interesting to note that the word *anguish* is also derived from the Latin *angustus* for 'narrow' or 'tight'. *Angere* in Latin means 'to squeeze' or 'strangle'. No link could be established between the Latin words *angere* and *angustus*, words that both denote a sense of 'narrowing and constriction', and another Latin word, *anguis*, that means 'snake', a word with its own indirect implication of a sense of 'narrowing and constriction'. The piece was made on Monday, 22 February 1993.

👉 **A58**

ANICONIC

An *icon* is an image, a figure, a representation or even an illustration in a book. The term *iconic* therefore pertains to *icons*. *Icon* is derived from the Greek *eikon* and although it has come to denote 'a likeness' in a broader sense, it was once specifically

used in art for ancient portrait statues of victorious athletes, and hence for memorial statues and busts of a fixed type. *Aniconic* means 'not shaped in human or animal form' and is usually applied to abstract idols and symbols. The triangular shape of the BLIND ALPHABET PROJECT was originally designed in 1987 as the maquette for a trophy, awarded for excellent driving. Because it had been commissioned by the National Road Safety Council, its shape was based on the Council's emblem which is a triangular yield-sign. The *aniconic* form is a remake of the first trophy. It was completed on Tuesday, 23 February 1993. Imbuia (*Phoebe porosa*) and Oregon Pine (*Thuja plicata*) were alternately laminated to the required thickness of the trophy.

👉 A59

ANISOPHYLLY, ANISOMEROUS

Anisophylly describes the appearance of leaves coming from one plant species when these leaves have two or more different shapes or sizes when subjected to the same conditions. The *aniso-* prefix comes from the Greek word *anisos* that means 'not equal'. *Isos* in Greek means 'equal'. *Aniso-* also features in other word-combinations: *anisodynamous* is a botanical term that means 'growing more strongly on one side of the axis than on the other'. *Anisomeric* is a chemical term for 'not composed of the same proportions of the same elements'. *Anisomerosus* means 'not having equal parts or not having the same number of parts'. The sculpted form is a remake of a White Mulberry (*Morus alba*) branchlet, actually picked in the garden with its two remarkably *anisophyllous* leaves situated opposite each other. Mulberries are known for being *anisophyllous*. Cape Beech (*Rapanea melanophloeos*) was used for the stem part and Transvaal Beech (*Faurea saligna*) for the two differently shaped leaves. The structure was completed on Wednesday, 24 February 1993.

👉 A60

ANNULATE, ANNULATED, ANNULAR, ANNULOSE, ANNULOUS, ANNULOID, ANNULATION

The seven words are all derived from the Latin *annulus* that means 'ring'. *Annulate*, *annulated*, *annular*, *annulous*, *annulose* and *annuloid* indicate a ring-likeness and a state of being ringed. *Annulate* and *annulated* further mean 'furnished or marked with a ring or rings', 'that wears rings', and, 'marked with ring-like lines, ridges or grooves'. *Annulation*, a noun, describes the formation of rings or ring-like divisions. *Annulose* is also used in zoology for bodies that are formed of a series of ring-like segments. The nouns *annulus* (which see) and *annuloid* are still used to denote rings, discs and doughnut-shaped solids in geometry, zoology, botany, and astrology. For the discussion on heraldic

rings, refer to *annuletty*. An oblique cylinder with a ring around its centre was made for the BLIND ALPHABET PROJECT on Tuesday, 4 May 1993. It was made out of Kiaat (*Pterocarpus angolensis*) and Yellowwood (*Podocarpus* sp.) in reference to the appearance of a rings around serviettes, pillars, legs, arms or fingers.

👉 A61

ANNULETTY, ANNULATED, ANNULLY, ANNELLED

Annuletty, *annulated*, *annully* and *annelled* are heraldic terms that mean 'ringed' or 'having ends terminating in rings'. In heraldry, an *annulet* is simply a ring or a small circle worn as a charge. Two *annulets* interlaced are sometimes called a 'gimmel ring'. 'It is also possible to get 'a network of *annulets* interlaced'. In archaic usage, an *annulet* is a small fillet encircling a column. In heraldry, animals are often shown with parts of their bodies ringed. An *annelled* bull is one with a ring through its nose. In Latin, an *annularis* is 'a ring' and as such found its way into heraldic terminology through French. A wooden bar was made of Wild Olive (*Olea europaea* subsp. *africana*) and a loose ring was fixed through each end. The rings are of Red Ivory (*Berchemia zeyheri*). The piece was completed on Saturday, 1 May 1993. For other words that describe solid rings, ringed objects or rings as segments, please see the entries under *annulus* and *annulate*.

👉 A62

ANNULUS, ANNULOID

The noun *annuloid* is used for any ring-like object, but it also functions as adjective to describe a state of ring-likeness. The eminent scientist and biologist, Thomas Henry Huxley (1825 to 1895) placed the *annuloida* animals between the *annulosa* and the *infusoria*. *Annuloids* and *annuli* (singular *annulus*) are solid bodies like doughnuts and the tubes of automobile tyres. A doughnut-shape can also geometrically be designated as a *torus*. In geometry, *annuli* are drawn by means of compasses as a flat rings of varying width. *Annular* rings (note the implied tautology) are exposed if the trunks of trees are sawn through. The adjectives describing the various states pertaining to rings are discussed under *annulate* and heraldic words for rings are discussed under *annuletty* (which see). The Latin word *annularis* means 'a ring' but in anatomy an *annularis* is also the ring-finger of the hand. A solid, biomorphic *annuloid* doughnut was made for the BLIND ALPHABET PROJECT in reference to Huxley's *annuloida*. The piece is of Stinkwood (*Ocotea bullata*) and was completed on Thursday, 25 February 1993.

👉 A63

ANSERATED

Anserated came into use in 1678 and is the heraldic term for 'having the ends cleft'. It usually describes a forking at the ends of the members of a cross into the heads of serpents, eagles and other animals. In Latin, *serra* means 'a saw'. *Serrate* and *serration* relate to the condition of being toothed or of having saw-like indentations. *Anserated* (the heraldic spelling only has one 'R') describes a splitting or 'toothing' into two heads. No visual examples of an *anserated* cross could be found and the two pairs of serpents heads on the endings of the cross-member and the pair of eagle's heads at the peak of the upright member were made in reference to the definition in the dictionary. The symbolism of an eagle's head as a fixture on a cross, points to the resurrection: '... they shall mount up with wings as eagles ...' (Isaiah 40:31). Serpents attest to the role of the devil and the way death was overcome at the crucifixion: '... that old serpent, called the Devil, and Satan, which deceiveth the whole world, he was cast out ...' (Revelation 12:9) The piece was made on Friday, 26 February 1993 from Tamboti (*Spirostachys africana*).

👉 **A64**

ANSERINE, ANSEROUS

Anserine is often used to describe the shape of a goose. Geese might vary somewhat in shape, but it is commonly agreed that they fit in somewhere between the ducks and swans. Other birds like the geosanders from the duck family might have typical *anserine* appearances and even people might be so unfortunate as to be endowed with *anserine* or large-bodied shapes with rather long necks. Such overemphasized features might be complemented by an *anserine* gait or a clumsy waddle. The word's far greater application, however, is to portray someone as foolish, stupid or silly. *Anserine* is a transformation of the Latin word *anser* that means 'a goose'. A similar transformation occurs to the Latin word *asinus* when someone is called 'asinine'. That is 'to be like an ass' or 'obstinate and stupid'. The word *anserous* is less frequently used. The simplified shape of a goose was made for the BLIND ALPHABET PROJECT on Saturday, 27 February 1993 from Kiaat (*Pterocarpus angolensis*). Painted *anserine* carvings, like this one, are used as decoys by hunters and trappers to entice wild geese into the open or to places of ensnarement.

👉 **A65**

ANTHOID, ANTHEMION

The ancient Greeks used the *anthemion* as decorative element on their ceramics and buildings. It has the form of a few palm-shaped petals that can be repeated lengthwise. The Egyptians and other middle eastern countries inspired the Greek design with earlier honeysuckle or lotus palmettes. Palmettes differ from rosettes, or rose-like ornamentations, and from fleurettes that can

resemble any small flower. Today, even rosettes and fleurettes are referred to as anthemions. In Greek architecture the single-palmette form appeared on acroteria, antefixes, and at the top of vertical steles. The continuous pattern of alternating lotus and palmette configurations was used especially on the connecting spirals of the cyma recta moulding of the cornice. *Anthoid* simply means 'flower-like' and comes from the Greek *anthos* for a 'blossom' or 'flower'. The design of the Tudor rose has five scalloped petals. A decorative rosette pattern, much like that of the Tudor rose but with eight petals, was composed for the BLIND ALPHABET PROJECT on the two flat sides of a block of Blackwood (*Acacia melanoxylon*). The piece was completed on Monday 1 March 1993.

👉 **A66**

ANTICLASTIC

Two definitions for *anticlastic* were found in reference books. The first one pertains to a surface that is curved convexly along its length and concavely across its breadth. This definition was interpreted as a barrel-like shape with convex indentations at its extremities. The body of this shape flows smoothly and uninterruptedly into its own concavities to form an *anticlastic* surface at each end. Later, when a second and more accurate definition was found, the object made for the first definition was redesignated to the term *bouge* (which see). The second definition applies to a surface having two curvatures, transverse to each other, in opposite directions, as the surface of a saddle. The reference to a saddle helped clarify the second definition, because it too could easily be construed in the manner of the first definition. *Anticlastic* is a saddle-shaped surface. The word can be employed to describe 'saddle-back' mountains. A saddle-like surface with the underside of the saddle filled in, was made on Tuesday, 2 March 1993 of Kiaat (*Pterocarpus angolensis*), Cedar or Toon (*Cedrela Toona*) and Imbuia (*Phoebe porosa*).

👉 **A67**

ANTICOUS

Anticous is derived from the Latin word *anticus*, through the root *ante*, which means 'before'. The Latin *anticus* therefore means 'in a forward position' or 'in front' and its opposite, *posticus* relates to that 'which is behind' or 'at the back'. *Anticous* was introduced into English as late as 1870. In botany, *anticous* describes elements that are turned towards the axis to which they are assigned. It can, for example, be used for flowers or leaves fronting the axis of the whorl to which they belong. A synonym for *anticous* is *introrse*. *Introrse* likewise indicates the position of things that are turned or directed inwards. For the BLIND ALPHABET PROJECT some fantasy daisy-flowers were arranged on curved stalks so that they 'look back' at their own whorl.

Daisies were used because the word daisy appropriately means 'day's eye' and this helped establish the idea of fronting or 'looking at'. The bulk of the piece was made from Kiaat (*Pterocarpus angolensis*) and a number of miscellaneous woods were used on the flower parts. It was completed on Saturday, 6 March 1993.

👉 **A68**

ANTIDROMOUS, ANTIDROMAL

Antidromous means 'to run in an opposite direction round an axis'. It is derived from the Greek prefix *anti-* which means 'opposite', 'against' or 'rivaling', and from *dromos* for 'running'. A *dromas* is Greek for 'a runner' and is sometimes encountered in other English words such as *dromedary*, a fleet-footed camel. *Siderodromophobia* is an inordinate fear for trains. The Greek *sideros* for iron and *dromos* for 'running' combine to form the 'train' part of the word. The term *antidromous* and a variety, *antidromal*, can be effectively employed in describing cogs, axles and gears that run in directions opposite to each other or opposite to their own axes. To illustrate this principle, a few wooden gears were made to propel a wooden shuttle in the opposite direction to that of a rotating axis. The axis can be turned by hand and most of the gears are concealed. Sawdust or talcum powder are excellent lubricants for parts that refuse to work. The piece was made of Yellowwood (*Podocarpus species*), Mahogany (*Swietenia macrophylla*), Imbuia (*Phoebe porosa*) and Oregon Pine (*Thuja plicata*) on Thursday, 4 March 1993.

👉 **A69**

ANTRAL, ANTRE, ANTRUM

The adjective *antral* pertains to a cavity. The word is rare, but nevertheless still used for trees or teeth with hollows in them, and for burrows or caves. *Antre* is more often encountered, but then hardly ever as a morphological word. It is used poetically for caves and caverns. William Shakespeare wrote in Othello of 'Antars vast, and Desarts (deserts) idle ...'. The Latin word *antrum* means 'a cavity', 'the hollow of a tree' or 'a cave'. *Antrum* is still used in physiology for cavities in the body. The word *antral* was reduced to something vaguely resembling a hollow by making a deep, smooth, simplified indentation in a solid, boat-shaped piece of Yellowwood (*Podocarpus* sp.). The rooms of the heart and other hollows found in anatomical organs were kept in mind when the form was conceived. Other *antral* references used were the cavities of vessels like vases, bottles or boats and pockets in jackets and other pieces of clothing. Even air pockets like those found in substances such as dough, wood, soil and other solids were looked at. The shape was made on Wednesday, 3 March 1993.

👉 **A70**

**ANTROVERSION, ANTEVERSION,
ANTRORSE, ANTROVERT,
ANTEFLEXION**

In botany, something directed forward and upward, is in an *antrorse* position. To *antrovert* would therefore mean 'to turn or bend something forward'. The opposite of *antrorse* is *retrorse* and it means 'backward'. The word *antrorse* is a combination of the Latin *ante* for 'in front' or 'forwards' and *versionem*, which is either composed from *versus* or *versum*, which means 'in the direction of', or from *orsus* which means 'turned'. In physiology, *antroversion* and *anteversion* mean 'a bending forward'. The more frequently used *anteflexion* is derived from the Latin *flexus* which is 'a bend' or 'curve'. *Anteflexion* is specifically used in obstetrics to indicate the proper position of the uterus. For the BLIND ALPHABET PROJECT, two simplified branches of a tree cactus were made to grow forward and away from a central stem in search of sunlight. The piece was completed on Friday, 5 March 1993 out of Burmese Teak (*Tectona grandis*) and Kiaat (*Pterocarpus angolensis*).

👉 **A71**

APOPETALOUS

Apopetalous is a botanical term for having the petals distinct or free. A similar concept is discussed under *choripetalous* (which see). The Greek suffix *apo-*, for 'detached' is used in other combinations, where it also means 'free', 'away from' or 'asunder'. An *apostle* is, for example, someone who is 'sent away from' a place, and *apostasy* is the 'moving away from', or the renunciation of one's faith. *Apogean* or *apogeanal* mean 'the proceeding off from the earth or land'. In botany, *apo-* also combines with other features in morphological descriptions such as *aposepalous* for 'having the sepals free' and *apocarpous* for 'having the carpels distinct'. The flower belonging to the Fragrant Orchid Tree (*Bauhinia x blakeana*) has very distinctly separate petals. A simplified model of these was made on Tuesday, 9 March 1993 out of Pau Marfim (*Balfourodendron riedelianum*). Pau Marfim is a very tough and hard wood and was suitable because the petals were made extremely thin and wavy. They are loosely inserted on a round base of Rosewood (*Dalbergia Stevensonii*).

👉 **A72**

APPAUMÉ, APAUMY, APAUMÉ

Appaumé is an heraldic word that describes the position of an open hand or gauntlet. A *hand appaumé* was made on Wednesday, 10 March 1993 out of Jelutong (*Dyera costulata*) and mounted on a block of Rosewood (*Dalbergia stevensonii*) so that the detailed palm-side faces up. The open hand symbolises bounty, liberality and justice. An outstretched *hand appaumé* offers blessing, protection or welcome. One of the lasting symbols

of Islam is the open hand that stands for the five basic precepts: profession of faith, prayer, pilgrimage, fasting and charity. The Christian, *hand appaumé* suggests blessing, divine grace or favour. The thumb symbolises the Father, the first finger the Holy Spirit, the second, Christ and the third and fourth the two natures of Christ. Synonyms less frequently used in heraldry are *apaumy*, *apaumé* or *appalmed*. Because the meaning of *appalmed* can be too easily guessed at, it was not embossed in Braille on the base. The English heraldic word comes from the French *à paume* which denotes the palm of the hand, but the older Latin, *palma* for the same is clearly closer to the ordinary non-heraldic English 'palm'.

✎ A73

APPEND, APPENSE

To *append* means 'to hang on' or 'to attach as an accessory'. In Latin, *pendeo* means 'to hang suspended'. The words *pendant* and *pendulum* are also derived from it. When something has been hung, it is correctly referred to as *pendent* or *pendant*. The adjective *appense* is rarely used, and usually in a botanical sense for 'hung up' or 'pendulous'. An *appendix* or *appendage* is something 'attached to' or 'hanging on to' something larger and supportive. A house can have smaller rooms added as *appendages*, and additional remarks or lists can be *appendages* to speeches and books. For the BLIND ALPHABET PROJECT eight blocks were hung from an overhead platform. The blocks are made of Tamboti (*Spirostachys africana*) and the overhead platform of Pau Marfim (*Balfourodendron riedelianum*). The platform is fixed to a base of Imbuia (*Phoebe porosa*). Note that the suspended blocks slide up and down. Each block is interconnected to one other and moves simultaneously with it. The work was completed on Thursday, 11 March 1993.

✎ A74

AQUILINE

In 1646, *aquiline* was first defined as 'hooked or arched like an eagle's beak'. *Aquiline* is most often found as a description of noses, like Julius Caesar's, who gave his name to a gynecological operation rather than a nose. William Cowper (1731 to 1800) wrote: 'Terribly arch'd and *aquiline* his nose ...'. Later, in 1656, the definition was extended to include the general meanings of 'pertaining to the eagle' or 'eagle-like'. The Latin for a female eagle is *aquila*, with *aquilus* being the male. In Latin times, the eagle was the standard of each Roman legion and an *aquilifer* was the standard-bearer. Because of their strength, eagles have been a symbol of war and imperial power since Babylonian times. As a Christian symbol, the eagle personifies the Spirit, ascension (see *anserated*), spiritual aspiration and the Last Judgement when it throws the damned

out of the nest. The eagles belong to the family *accipitridae* or hawks. The morphology of the hawk's foot is discussed under *accipitrine* (which see). A typical *aquiline* beak was made for the BLIND ALPHABET PROJECT on Friday 12 March, 1993 out of a solid piece of Kiaat (*Pterocarpus angolensis*).

✎ A75

ARABESQUE

Originally, some Mediæval artists practised an *arabesque* style acquired from Hellenistic craftworkers who had contact with the art of Asia minor. This early *arabesque* style was based on intertwining plants and it included birds and animals in a highly naturalistic setting. Later on, after the year 1000, Muslim artists were not allowed to illustrate birds, beasts or human figures. The Koran prohibits the making of 'graven images.' The new formal and *aniconic* (which see) style became an essential part of the decorative tradition of all Arabian cultures. Since the Renaissance, European artists have maintained a predilection for early and late *arabesques* as references for florid designs in illuminated manuscripts, furniture, metalwork, ceramics, carpets art and architecture. *Arabesque* was consequently coined in the 16th century, in France as the correct word for 'fanciful Arabian' design. The symmetric design of a girandole, that is a design like that of revolving fireworks or revolving water jets, was made in reference to the formal *arabesque* style. It was completed on Friday, 19 March 1993 and its intertwining parts are made of many different kinds of wood.

✎ A76

ARCIFORM, ARCUATE, ARCUAL, ARCUATED, ARCUATION, ARCUS

The four adjectives *arciform*, *arcuate*, *arcual* and *arcuated*, all mean 'bent like a bow' or 'bow-shaped'. *Arciform* more specifically denotes the arched shape of certain arteries and nerve fibres. *Arcuation* doubles as noun and verb to mean 'the curving of something into an arch', or, 'to shape by incurvation or excurvation'. *Arcuation* is the making of arches in building or such arched work itself. In horticulture, *arcuation* is also a method of raising trees, by bending down twigs and pegging them into the ground to take new root. An *arcograph* is the instrument for drawing an arch without using a central point. Occasionally any arch-shaped structure or arch can be referred to by the original Latin name for 'bow' or 'arch', namely *arcus*. *arcus* also gave 'archery' its name. The shape for this project was made in reference to the fact that thick and short muscles and therefore also the forms of bananas and cucumbers (see *cucumiform*) can be *arcuate*. A short and solid, bow-like shape was made in Kiaat (*Pterocarpus angolensis*) on Saturday, 13 March 1993.



👉 A77

ARCTOID

Although *ursine* is the more common term for 'related to', or for 'looking like bears', the more abstruse and rarely used *arctoid*, from the Greek *arktos*, for 'bear', was preferred for the BLIND ALPHABET PROJECT. The Latin for bear, *ursus* serves to classify bears zoologically into the family *ursidae*, and only occasionally does *arktos* find its way into the Latinized Greek of their specific names: The sun bear, also called the honey bear is called *Helarctos malayanus* and the Alaskan brown bear, *Ursus arctos* is a species that includes the eighty forms of grizzly bear. The spectacled bear, *Tremarctos ornatus*, comes from the Andes and is the southernmost bear on earth. *Arctoid* behaviour can be displayed by other animals or by human beings when they eat large amounts of food before entering a very long period of deep sleep. The fairly common *arctoid* pose of *Ursus arctos* as it arches and lurches forward, was used as reference for a simple sculpture made of Oregon Pine (*Thuja plicata*) on Wednesday, 17 March 1993. Note that Oregon Pine comes from a region where the grizzlies roam freely.

👉 A78

ARILLIFORM, ARILLATE, ARILLATED, ARILLARY

The *aril*, or *arillus* as it used to be called in Latin, is an accessory seed-covering, more or less incomplete, formed between the time of fertilisation and the ripening of the seed. This formation is caused by a growth from the apex of the funiculus, at or just below the hilum. The funiculus is the little stalk by which a seed is attached to the placenta and a hilum is the point of attachment of the seed to its seed vessel. This extension from the seed-base that covers the seed fully or in part, is seen as the edible 'flesh' of the grape. The Spanish word *arillos* appropriately means 'a raisin'. *Arils* are often brightly coloured envelopes such as those found on the seeds of Nutmeg, the Yews and Castor beans. Animals are attracted to the *arils* and eat the seeds, thus dispersing them. *Arillate*, *arillated* and *arillary* are the adjectives that pertain in general to an *aril*, and *arilliform* is specifically related to its shape. The project-shape is a copy of a mature European Yew (*Taxus baccata*). It was completed entirely by hand on Monday, 15 March from English oak (*Quercus robur*) and Imbuia (*Phoebe porosa*).

👉 A79

ARISTATE, ARISTULATE

The Latin word *arista* still applies botanically to the awn or spikes found on the seeds of wheat or other grain and grasses. A leaf is *aristate* when it abruptly

terminates in a hard, pointed, subulate, that is, 'an awl-like', process. This pointed outgrowth is reasonably straight and can vary somewhat in length and thickness, provided that its length does not tend to make it look like a hair. Thick, hair-like points are better described as *piliferus*. The leaf's *arista* is always a continuation of the costa or midrib, and sometimes separates from the lamina or leaf blade below the apex. *Aristulate* describes diminutive spikes, but if the spikes are very minute and thin, they are better referred to as *setaceous*, or bristle-like. In heraldry, plants are *awned* when furnished with *aristæ*. The simplified seed-shape of the widespread South African Red grass (*Themeda triandra*) was chosen for the project-piece. Its *aristate* seed is made of Pau Marfim (*Balfourodendron riedelianum*) and hangs on a base of Oregon Pine (*Thuja plicata*). The work was completed on Tuesday, 16 March 1993.

👉 A80

AROIDEOUS

Aroids, or *arads* as they are also called, are plants allied to the *arum* lily of the order *Araceæ* or *Aroideæ*. The old Greek word for the *arum* is *aron* and *aroidous* or *arum*-like comes from it. The flower of the *arum* is the main reference point in qualifying other plants as *aroidous*. It is borne on a spadix at the end of a long stem and is surrounded by a spathe. A spadix is a special kind of flower spike in which unusually tiny flowers are embedded in the surface of a central axis. The spathe is a large and sometimes brightly coloured bract or modified leaf that usually surrounds or encloses the spadix. The Elephant's ear (*Alocasia macrorrhiza*) has a large, closed nondescript spathe, but the Oilcloth flower (*Anthurium andreanum*) is very popular in formal flower arrangements because of its open, heart-shaped, brightly coloured, wax-like spathe. The flower of South Africa's yellow *arum* lily (*Zantedeschia pentlandi*), was sculpted on Saturday, 20 March 1993. It has a spathe of laminated Imbuia, (*Phoebe porosa*), Mahogany (*Swietenia macrophylla*) and Pau Marfim (*Balfourodendron riedelianum*). The stem is of Poplar (*Populus* sp.).

👉 A81

ARRIS, ARIS, ARRISED, ARRISWISE, ARRISWAYS

An *arris* or *aris* is a sharp edge formed at the angle where two flat or curved surfaces meet. *Arrises* are the edges of a prism, but they are more commonly found in architecture. On a Doric column they are the edges that separate the flutings. An *arris*-gutter is a V-shaped wooden gutter, fixed to the eaves of a building. The building trade is familiar with *arris* beams, *arris* fillets and *arris* rafters. *Arrisways* or *arriswise* describes the angle or direction followed across an *arris* edge. The plates on a very steep roof are arranged *arriswise* because they are squared with

the direction in which the *arris* of the roof inclines. Where the plates meet at the *arris*, they are neatly *arrised* or trimmed to follow its sharp slant precisely. The word *arris* is a corruption of the old French word *arestes*, which means 'a sharp ascending ridge' or 'the edge of a mountain'. The modern French *arête* is also used in English for the same. The French words in turn, were derived from the Latin *arista* for the 'ear of a corn-seed' (see *aristate*). The simple shape of a steep roof-prism was made of Oregon Pine (*Thuja plicata*), with an inlay of Zebrano (*Microberlinia brazzavillensis*) on Monday 22 March 1993.

A82

ARUNDINACEOUS, ARUNDINEOUS

Anything reed-like or reedy can be called *arundinaceous*. Reeds are in reality large aquatic grasses. The most common reed in Europe is the Giant reed. *Arundinaceous* and *arundineous* describe qualities of, or resemblances to the Giant reed. Nowadays, Giant reed is mostly visible from the roads since its ability to grow in dense clumps has made it very suitable for erosion control and in highway beautification programs. Its botanical name, *Arundo donax*, is a reference to the Latin word for it: *harundo*, also spelled *arundo*. Giant reed can grow up to seven metres tall, but it is not really all that gigantic when compared to the tall tree-like grasses, commonly referred to as Bamboos. The taller Bamboos reach unbelievable heights, for a grass that is, of up to forty metres. Consider that one of the smaller varieties of Bamboo looks somewhat like the giant reed; it is *arundinaceous*, so to speak. This *arundinaceous* resemblance is reflected in its specific name: *Bambusa arundinacea*, and served as reference for the project-sculpture. Only a section of reed, broken back upon itself was made in Oregon Pine (*Thuja plicata*) on Tuesday, 23 March 1993.

A83

ARYTENOID, ARYTAENOID

An object that is *arytenoid* is shaped like a funnel or pitcher. The Greek *arytaina* is a small pail, and, to *aryto*, is to draw something to drink. *Arytaenoid* is the Latin version of the word. The project-shape is based on a pitcher with both ends open. It is an approximate copy of the shape of the *arytenoid* cartilages at the back of the larynx. There are two of them that form the shelter of the vocal cords and their attachments. They are shaped like an upside-down bell with thick walls allowing an aperture through the centre. It may be true that a pitcher is closed at the bottom, but their name, *arytenoid*, is derived from their shape as much as from the fact that they seem to 'draw water' from the mouth, through to the stomach. The *arytenoid* muscles actually close off the voice box when someone swallows. They are sometimes removed in a surgical operation called an *arytenoidectomy*, made

necessary by cancer of the vocal cords. The project-shape, made on Wednesday, 24 March 1993, is a laminate of Pau Marfim (*Balfourrodendron riedelianum*), and Jarrah (*Eucalyptus marginata*).

A84

ASPERGILL, ASPERGILLUM

Aspergill is the proper name of a small, ornate brush that was once used by the Roman Catholic Church to sprinkle holy water. *Aspergillum*, the Latin form, still emphasises a link with Rome. The brush has a brass handle of four by one centimetres and horse hair is commonly used for the bristles that are in the region of six centimetres long. The model in the BLIND ALPHABET PROJECT was copied from the small *aspergillum* in the collection of antiquities at the Cathedral of Christ the King. Their rare little brush might very well be the only one in Johannesburg because an extensive search in Catholic books, shops, brochures and other places had been entirely fruitless. The little brush was only intended as study material for the shaping of *aspergilliform* (which see), but because of all the trouble it took to find it, the *aspergill* was sculpted all on its own. Together, the two shapes illustrate how morphological words for natural forms are derived from ones for man-made objects. The handle is of Tamboti (*Spirostachys africana*) and the bristles of Jelutong (*Dyera costulata*). The work was done on Thursday, 25 March 1993.

A85

ASPERGILLIFORM

When something is *aspergilliform*, it resembles the *aspergill* (which see), or *aspergillum*, as it is known in Latin. An *aspergill* is a little brush, formerly used as a holy water sprinkler in the Roman Catholic Church. The stigmas of grasses are often *aspergilliform* and a genus of microscopic fungi known as the *aspergillus* also resemble the holy water sprinkler-brush. Because the Latin, *aspergo* means 'to sprinkle' or 'a liquid that is sprinkled', it was thought that *aspergilliform* might indicate the appearance of surfaces that are 'splattered' or 'blotted with stains', but extensive research showed that the form is indeed brush-shaped. The seed-floss of Common milkweed (*Asclepias incarnata*) resembles a holy water sprinkler and was chosen as subject for the BLIND ALPHABET PROJECT. The floss is very light and silky. The strong textiles and rope made from it can float on water. Burmese Teak (*Tectona grandis*) makes up the seed-part and the floss is of Jelutong (*Dyera costulata*). The form was completed on Tuesday, 20 April 1993.

A86

ASPERITY, ASPERATE

Asperity denotes an unevenness or roughness of surface and is also the noun for sharp or rough excrescences and outcrops. *Asperity* can be found on

coarse rasps, and scabrous leaves. Plants bearing such leaves are referred to as *asperfoliate*. *Asperate*, the adjective, doubles as verb for ‘causing roughness, ruggedness or harshness’. *Asperity*, and the now-obsolete words *asperness* and *asperly*, are figuratively employed to highlight harsh feelings, temper or things that are fiercely or bitterly contested. In Latin, *asper* means ‘rough’, and an *asperum* is ‘a roughness’ or ‘a rough place’. The *asperate* sandpaper that helped to smooth the wood of this project, comes in grades ranging from 40 to 250. The 40, for example, indicates that there are forty grains of silicon abrasive for every linear inch of sandpaper. Two grades well-detectable to touch are 60 and 100. They were fixed on the two flat sides of a rectangular block of Kiaat (*Pterocarpus angolensis*). A broad band of Oregon Pine (*Thuja plicata*) frames the sandpapers. The piece was completed on Thursday, 18 March 1993.

✎ A87

ASTERIATED, ASTERACEOUS

Asteriated and *asteroid* mean ‘radiated’ or ‘with rays diverging from the centre as those of a star’. *Actinomorphic* (which see) can also be used for ‘radiated’. The Greek word for a star is *aster*. *Asteroid*, the noun, is also one of numerous planetary bodies, or a kind of firework. An *asterisk* is anything shaped or radiating like a star. It is most commonly used for the figure of a small star (*), found in writing and printing to mark references and to indicate omissions. The Daisy family or *asteraceae* is one of the largest in the plant kingdom and is characterised by its small flowers consisting of rays and disc florets that combine into composite heads. *Asters* are also a large genus of flowers to which the Michaelmas daisy (*Aster novi-belgii*) belongs. Other flowers, like the China Aster, or even objects like sea-stars, that resemble true *aster* flowers are referred to as *asteraceous*. A simplified *asteriated* starfish was made on Saturday, 27 March 1993 in reference to an illustration by the German biologist, Ernest Haeckel (1834 to 1919). The work is in Kiaat (*Pterocarpus angolensis*), Poplar (*Populus* sp.) and Rhodesian Teak (*Baikiaea plurijuga*).

✎ A88

ASTRAGAL, ASTRAGALAR

As an architectural term, *astragal* denotes a small moulding or beading of semi-circular section, usually placed at the top or bottom of columns. The moulding is sometimes decorated with a bead and reel enrichment. In the craft of gunnery it is a ring or moulding encircling a cannon about 15 centimetres from the mouth. The term has been in use since the 1650’s. Square-shaped mouldings are called ‘fillets’. Today, any half-round protruding strip on its own or in an architectural moulding can be called an *astragal*. In the manufacture of furniture it is the

half-round strips or bars that hold the glazing in place. In keeping with the more generalised definition of the word, a large *astragalar* strip was constructed for the BLIND ALPHABET PROJECT around a square block of English Oak (*Quercus robur*) The half-round moulding is of Meranti (*Shorea* sp.), and the cap on which the Braille is written, is of Blackwood (*Acacia melanoxylon*). The piece was finished on Monday, 29 March 1993. The word *astragal* comes from the Greek, *astragalos* for ‘the ball of the ankle joint’. The physiological word for the ankle joint is Latinized into *astragalus*, but it is now regarded as obsolete, and the term *talus* is generally preferred.

✎ A89

AURIFORM, AURICULATE, AURICULATED, AURICULOID, AURICLE, AURICULAR

Auricles are pairs of blunt, little ear-like projections at the base of some leaves. *Plumbago auriculata* has them separate, at the base of its leaf stalk. *Auricle* was coined in the 1650’s, and comes from the Latin *auricula*, which is the diminutive of *auris* or ‘ear’. *Auriculate*, and to a lesser degree, *auriculated* and *auriculoid* are adjectives for things, especially plants and sea-shells that have these little ears or ear-like processes. The general notion of any animal or human ear is usually implied. In one species of *Primula*, botanically referred to as *Primula auricula*, the common name, Bears’s ear, gives away that the taxonomists had a specific animal in mind. *Auriform* refers to ears of any shape and size. In Northern Europe of the late 16th and early 17th century an *auricular style* of ornament flourished. The *auricular* or lobate style is so called because it resembles the convoluted cartilage of the human ear. A leaf with two pronounced *auricles* at its base was made on Friday, 26 March 1993 from *Imbuia* (*Phoebe porosa*).

✎ A90

AVELLAINE, AVELLANE

An *avellaine* or *avellane* is an heraldic cross shaped like a cluster of filberts or hazel nuts. The hazel, or *avellan* (which see) as mystical symbol, predates its use in the heraldic cross *avellaine*. Like all nuts, hazels symbolise hidden wisdom and are associated with the Mother Goddess. They represent peace and lovers because they are closely clustered together. As the hallowed tree of the Celtic groves the hazel portrays inspiration, divination, magic and chthonic powers. It is the Tree of Life that grew in *Avalon* beside the sacred well containing the salmon, an archaic fish with a foreknowledge of the gods and the otherworld. Only the salmon might eat of the hazel. In Greece, the rod of Hermes, the messenger of the gods was from a hazel tree. There it symbolised communication, reconciliation and poetic inspiration. Jacob of the Old Testament

apparently used magical hazel twigs to produce the mottled sheep and cattle. The *crux avellaine*, made for the project, differs from a cluster of hazel nuts in that it has a quincunx or fifth shape added to the centre. It was made of Mahogany (*Swietenia macrophylla*) on Monday, 19 April 1993.

A91

AVELLAN, AVELLANOUS

The old Latin for 'hazel nut' is *Avellana nux*, after *Avellanus*, a place in Campania. The Hazel nut, or cobnut tree is still called *Avellan*, but the Latin for it is *Corylus*. Hazels carry the appropriate botanical name of *Corylus avellana*. *Avellanus* means 'hazel-coloured'. Another, slightly bigger, but otherwise very similar nut as the hazel, the filbert, is called *Corylus maxima*. Filberts are named after St. Philibert because they ripen every year at the time of St. Philibert's day, on 22 August. The names of filberts and hazels are easily mixed-up. Both have nuts that are shaped like acorns. Instead of having the domed caps of acorns, their nuts are formed in leaf-like involucre or frills. In a preliminary study, on 30 March 1993, four nuts were compacted together in a cross-shaped cluster. Hazels are not commonly grown in South Africa and the study shows how they appear in reference books. This copy of the natural form of four clustered *Avellans* is of Kiaat (*Pterocarpus angolensis*), itself an *avellanus* wood. Nineteen days later, after sufficient reference had been obtained at Canterbury Cathedral in England, the true heraldic *avellaine* (which see) was sculpted.

A92

AVENIFORM, AVENACEOUS

Aveniform describes anything that is oat-like in appearance, and usually applies to grasses or False oats (*Arrhenatherum* sp.). *Avenaceous* is more generally used for the nature and appearance of oats. In botany the oat grasses, or *Avenae*, derive their name from the Latin for cultivated oats, *avena*, which also indicates any stalk or straw. Samuel Johnson (1709 to 1784) defined oats in his marvellous old dictionary as "a grain which in England is given to horses, but in Scotland supports the people." Cultivated oats, or *Avena sativa* has a plant-structure made up of numerous grass-like branches bearing florets that produce the caryopsis, a one-seeded fruit. Its *arista* (which see) is smaller than that of common wheat and the ears are divided into a cluster, not a spike. The wild oat (*Avena fatua*) is a tall grass, resembling the cultivated oat. This is the proverbial 'wild oats', sown when youthful follies or excesses are committed. To indicate that oats are cereal plants, the impression of a few branchlets of oats was carved-out in relief on the inner surface of an oval-shaped bowl. The piece was completed on Friday, 23 April 1993. The wood is Pau Marfim (*Balfourrodendron riedelianum*), and

some seeds, made of Hop Hornbeam (*Ostrya caprinifolia*), were loosely dangled to suggest the oat-grains. The bowl is mounted on Rosewood (*Dalbergia stevensonii*).

A93

AVERSANT

Aversant is an heraldic term for 'clenched'. The opposite of the heraldic clenched fist, is the *hand appaumé* (which see), or 'open hand with the palm-side visible'. *Aversion* in French and English indicates a strong dislike or detestation. It was formed from the Latin *aversor* which means 'to turn away', to 'repel' or 'shun'. Clearly, a clenched fist as an heraldic charge serves as a threat or to indicate aggression towards enemies. In practice, the clenched fist salute, also known as the black power salute, is meant to show assertive determination to succeed against the opposition. It has created consolidation amongst the members of the groups displaying it. It is an irony that *salute* comes from the Latin *salus* for 'health'. The clenched fist is almost always that of the right hand because the right hand symbolises power. Note that the model of a *fist aversant*, made for the BLIND ALPHABET PROJECT, is of the left-hand. It was sculpted in three-dimensional detail on Monday, 3 May 1993 in Small-Leaved Lime (*Tilia cordata*), obtained from a wood carver north of Aberystwyth in Wales. The wood is light, yet compact and is most suitable for carving.

A94

AXOTOMOUS

Axotomous is a term used in mineralogy for rock or crystal formations that have a cleavage perpendicular to the axis. A cleavage is a shift or split along structural planes. The *axo-* part of the word comes from the Greek *axon* which means 'an axis'. The Greek *tomos* indicates a 'cutting' or 'slicing'. The word is perhaps better described as 'a cutting or slicing through the

axis'. The complex nature of geological formations makes it difficult to trace the axial areas. An axial surface joins the hinge lines of adjacent folded surfaces. Where it is planar or flat, it is called the axial plane. Sometimes cleavage, also called *schistosity*, can take place along the direction of an axis. It is then called *acrotomous* (which see). For the project, an eight-sided prism was made in Jarrah (*Eucalyptus marginata*). A stripe of Pine (*Pinus* sp.), was inlaid along its length. The crystal was cut through and the two parts, still in their relative positions, were shifted away from the central axis and fixed together. The inlaid stripe helps for the shift to be visually appreciated. The work was completed on Thursday, 1 April 1993.

