## James Drury Man who made the Bushman figures

The National Museum is indeed priviledged to house the excellent Bushmen display from the South African Museum in Cape Town until June of this year. This exhibition depicts aspects of the way of life of the Bushmen such as hunting, gathering, leisure and music, and has been widely acclaimed on a recent tour through Europe and Canada. The highlight of the whole display is the life-like human figures.

The suggestion to cast Bushman and Khoi (Hottentot) individuals was made by Prof von Luschan of the Volkekunde Museum, Berlin, to the then director of the South African Museum, Mr W L Sclater. However, this idea could only be put into practice, after the appointment of James Drury a Scottish taxidermist and modeller, who came to South Africa about 1902. Drury worked at the South African Museum from 1902 to 1942. Mr Sclater's successor. Mr L Peringuey, realized the importance of von Luschan's suggestion, and encouraged Drury to start with the casting. Consequently, a number of casts were made between 1907 and 1923.

In the beginning, some of Drury's subjects came to the Museum and were cast there. Later on he visited areas such as Prieska, Kimberley, Botswana, Lake Chrissie and South West Africa/Namibia (Sandfontein, Windhoek, Keetmanshoop) for the purpose of casting living Bushmen and Khoi. It is of particular interest to anthropologists, that he made casts of the Cape Bushmen, who are now virtually extinct. Most of Drury's travels were by train and ox-wagon. It is also interesting to know that many of his subjects were in gaol, and that he had to get permission from the local magistrates to use these people as models. The subjects were paid for being cast. Miss Shaw, an ethnologist at the S A M, estimates that about 80 moulds were made by Drury. Apart from these, a number of field moulds exist, which have never been cast.

According to Miss Shaw, James Drury was very secretive about his methods of casting. Apparently he was of the opinion that he had to learn the hard way and therefore everyone else could do so too! Fortunately, Rau has summarized Drury's techniques: "The moulds are made of plaster of Paris, and hessian of quaterter-inch mesh in used for reinforcement. The model is posed in the required position. Hair on the head and elsewhere is given a thick coating of soft soap. In case of hairy bodies, the body had to be shaved, but this is not necessary in the case of Bushmen or Hottentots."

Two half-moulds are cast for each section of the body (i e front and back of leg, front and back of torso etc.) and the technician now decides where the sections of mould should join. The section lines are marked on the skin with a water soluble pigment which will be transferred to the wet plaster. The legs are cast first and a thin layer of plaster of Paris is applied from the front to half way towards the back of the leg and extending about 5 cm above the marked section line. Strips of hessian soaked in plaster of Paris are applied and the mould is built up to a thickness of about 2,5 cm as the plaster thickens. The vertical edges of the mould must be formed as smoothly as possible where the back half of the mould will be cast.

The article continues: "When the first half is hard, it is left on the leg, the edge is given a coat of soft soap so that it can be separated from the other half, and then the second half of the leg is cast in the same manner. After hardening both half-moulds are taken off. They now show, inside, a print of the marking line which, at the same time, remains on the leg and can be re-drawn for the following sections. This is now cast about two inches below the same marking line. In order to enable the model to breathe while covered with plaster of Paris, the torso must be cast in two sections joining at approximately the lowest ribs. In this way the model is able to breathe with the rib muscles while the upper part is being cast."



Regarding the casting of the head mould Rau writes: "Its two halves are joined over the edges of the ears. The eyes are closed, but the nostrils have to be left open, which is easily managed if the correct moment in the hardening of the plaster is taken for casting the nostril area . . . . . . . . In between the casting of the various sections the model is allowed to rest. After the mould has been completed, the model must pose once more, this time lying down on his back with open eyes. Now a separate mould of only the orbital region is made. The eye itself remains uncovered, but the plaster of Paris is pushed as near as possible towards the edges of the eye-lids."

As this stage the moulds were returned to the studio, soaked in water, the releasing agent applied, and the markings were restrengthened where necessary. After all the section-moulds were cast, the marking lines on the positive casts indicated where the sections were to be cut and joined together. Once the complete figure was finished. Drury cut this plaster body into pieces to facilitate its handling. The new joints were given special locks, which made the mounting of the figure easy.



Top: Returning from a hunt

Bottom: Some of Drury's figures re-cast in fibreglass for the present exhibition.







After this, a separate mould of the orbital region was made. The openings between the eye-lids were cut in this cast, and artificial eyes fitted in from behind. This separate orbital piece was now fitted into the cast of the head, after the equivalent section had been removed. This ensured that the whole face, including parts of the eye-lids, was a cast of the model. Drury's figures needed some modelling and "finishing off" of the joints.

In order to obtain a positive cast, Drury had to destroy his original field mould. If more than one copy of a figure was required, a copy-mould of the finished original positive cast had to be made. These were made as "piece-moulds" from plaster of Paris, consisting of a few hundred pieces. Apart from full figures, Drury cast a number of busts in the same fashion. Field moulds were also carefully numbered. As useful guides for producing the positive cast Drury took measurements photographs, colour charts of his subjects.

For the present exhibition, some of Drury's figures were re-cast in fibreglass, using greatly improved methods such as rubber moulds. These modern casts are more durable, and are less likely to chip than plaster of Paris ones.

Author's note: The assistance received from June Hosford of the South African Museum to compile this article is greatly appreciated.

## Reference:

RAU, R. 1964. How James Drury cast the Bushmen displayed at the South African Museum. Suid-Afrikaanse Tydskrif vir Wetenskap 60: 242-244.

