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Can Gorillas Swim?

By Bob Golding

Introduction. This short story describes how, in December 1964, two young western lowland gorillas (*Gorilla gorilla gorilla gorilla*) were brought for sale to the Zoological Garden at the University of Ibadan in Nigeria. The animals were found to be held illegally and were confiscated by the Zoo on the instructions of the Nigerian Federal Government. The story describes the bizarre journey by road across the city of Ibadan with the newly arrived gorillas, during which one of them jumped out of the driver's window and disappeared into a crowd of people in the market nearby. It describes how the young animals first came into contact with water and how this influenced the design of a water barrier that was planned as part of a new ape building. After being moved to this new ape house in 1970, the two gorillas went on to develop their liking for water to the point where their lives in the University Zoo were significantly enhanced by their daily access to it, their use of it and frequent immersion in it. But... can gorillas actually swim?

was sitting in my office in the University of Ibadan Zoological Garden one morning in December 1964 when Aliyu, one of the cashiers at the visitors' entrance, knocked on my office door. He told me that some strangers had just arrived and wanted to speak to the person in charge about some monkeys they had for sale. I looked down to the bottom of



the flight of steps that ran up to my office and saw, in the shade of a large catalpa tree, four men of Asian appearance standing there. They were dressed rather shabbily and they somehow looked decidedly shifty. As I approached them down the steps they glanced at me, their faces devoid of expression. It was unusual for anyone coming to the Zoo with an animal for sale not to

have that animal with him or her, perhaps in a container of some sort or on the end of a length rope or tether. Very often a small animal such as a lizard or rodent would be brought to the Zoo in a calabash with a plug of green leaves in the top. But on this occasion I could see no trace of any monkeys.

The four men had been speaking to each other in a language I didn't recognise. One of them then turned and spoke to me in a form of broken English and with a strong accent that made him difficult to understand. He said they had for sale two monkeys they had obtained in Cameroon, the country immediately to the east of Nigeria, and had recently transported by road into Nigeria. He explained, slowly and at length, that he and his three companions were traders who travelled together around West Africa buying and selling various goods and materials. When I asked him where the monkeys were, he said they had left them in the accommodation they were renting temporarily in Ibadan town. He attempted to describe the animals but, largely reflecting our language and communications

difficulty, I didn't recognise any species of monkey from that area. Then I realised he might be describing chimpanzees and I asked him if their monkeys had tails. His answer was no.

This was becoming interesting! Could these men really have brought chimpanzees, or even gorillas, into Nigeria from Cameroon? It seemed at least possible from what their spokesman had said that the animals, whatever they were, had been brought into Nigeria legally, that is with the correct documentation and through two sets of customs checks, Cameroonian and Nigerian. I asked the spokesman why they hadn't brought the animals with them to the Zoo and his reply was that they were sometimes difficult to handle and had already bitten some people. So the men had locked them in one of the rooms they were



Central area of Ibadan with government and business offices and shops.

renting in town before coming to the Zoo. I decided I should view these creatures for myself as soon as possible before deciding what action to take.

The four men (in this story I shall at times refer to them as 'the Four' or the animal 'handlers') readily agreed to my accompanying them back to their lodgings so that I could take a look for myself. I called Abu, the Zoo's driver, and asked him to bring the Zoo's multi-purpose van immediately to take me and the four men to a location in town.

After we had driven for three or four miles, the men directed Abu to an area on the outskirts of Ibadan that was decidedly rundown. Along each side of the unsurfaced laterite road full of potholes was a range of low quality, gently decaying houses and other buildings. Most had a corrugated iron roof and some stood within a compound or large yard enclosed by some form of wall or wire-mesh fence. A few oil palms grew here and there but there were few large trees and very little shade. Because it was the middle of the



The four men trying to sell us the two young gorillas rented rooms in this poorer, outer area of Ibadan and locked the two young gorillas inside when they went out!

dry season and the middle of the day, the sun was relentless and everywhere was hot, very hot.

Abu was asked by the Four's spokesman to pull up at the side of the road adjacent to a gate giving access to the compound of a two-storey building. It was in this building the men said were their lodgings. Leaving Abu with the vehicle at the side of the road, I followed the four men on foot. One of them unlocked the gate and locked it again after we were all inside. We then walked

across the compound to the building where the men stopped outside a closed door. Their spokesman took a bunch of keys from his pocket and asked me to wait there. Then they



all went inside. I caught a brief glimpse of what seemed to be a darkened area or room before they closed the door behind them.

With some apprehension I waited. I didn't feel comfortable. There was nowhere to sit, apart from on the ground, and no shade except for a small patch near the building. The compound was bounded by a low wall topped by a wire mesh fence; it

provided no privacy at all and I was fully exposed to the nearby road on

one side. I paced very slowly around the compound, pausing occasionally in one of the small patches of shade and trying to be as inconspicuous as possible.

After a few minutes a couple of wild-looking dogs appeared at the side of the road and started to bark at me furiously through



the mesh fence. Small groups of local men, women and children stared at me from the roadside as they walked by. Two or three taxi drivers and a couple of motor cyclists honked their horns as they passed.

It soon became clear that the local people were not used to seeing a white man in that part of town, especially on foot and meandering around on his own in an obscure, back-street compound. Some people, including children, called out 'Oyinbo!' which is the Yoruba word for 'white person'. I was sometimes addressed in this way, especially when outside the University campus, and regarded it simply as a form of recognition or even as a greeting. On this occasion, however, I had no desire to be the centre of attention.



Imade on the day of her arrival at the University of Ibadan Zoo in December 1964.

After what seemed a long wait, the door of the house opened again. The Four's spokesman emerged first and was followed by one of his three companions who appeared in the doorway carrying... something. What was it? It was largely hidden by an old blanket or cloth. Then I saw what seemed to be a hand emerge from under the blanket. A smallish hand but with rather thick-set fingers and black hair. The hand was followed by a small, hairy arm. Then a face peered out over the top of the blanket. I blinked and took another look. It was the face of a young gorilla! Yes, the man was carrying a gorilla! Another of the Four then appeared in the doorway struggling with a second young gorilla!

This was a surprise indeed. Although the stilted discussions with the Four's spokesman at the Zoo earlier that morning had left me in little doubt that the 'monkeys' were actually great apes, I assumed, for a number of reasons, they would almost certainly be chimpanzees.

When I asked the spokesman if he or his colleagues had documents confirming their ownership of the gorillas and permission to export/import them, he responded in the affirmative, went back inside the house and returned with some papers in a large, slightly battered envelope. The Cameroonian papers were written in French, which I could not read very well, but the Nigerian papers were in English. On the face of it the Nigerian documents appeared to have originated in some sort of government department. However, when I began to read through them I noticed there were numerous spelling mistakes and grammatical and other errors and soon realised they were almost certainly worthless forgeries. I said nothing about this to the Four's spokesman at that point as it was beginning to look as though these men were indeed involved in some way with the illegal capture and transportation of the two young gorillas, creatures that were in dire need of protection in the wild.

I gave rapid thought to the implications of the situation I suddenly found myself in. It was clear that the unexplained appearance of two orphaned gorillas, particularly in the possession of people who almost certainly held them illegally, required immediate investigation, preferably by the Police. What I didn't want to do was scare the Four away before I had been able to gather more information. At that point I knew very little about the history and background of the gorillas or indeed about the four Asian traders. It thus seemed sensible to keep calm now, try to gather more information while I could and then return to the Zoo, perhaps with the gorillas, but also with some idea of how best to take the matter forward.

I told the Four's spokesman that I wished to examine the two gorillas rather more clpsely, to which he and his companions readily agreed. Even with the participation of the four men,

however, this proved to be difficult as both animals attempted to bite me when I tried to touch them. At my further request, and despite some resistance from the gorillas, the men then placed the animals on the ground so that I could at least observe them as they moved around between one handler and another. All four men attempted to control the young gorillas by shouting at them and generally being very rough with them. I found it distressing to observe how, after being treated particularly harshly on one occasion, one of the young apes flew into a frenzy of what I could only interpret as confusion and frustration.

The larger gorilla was male and the smaller was female. They were western lowland gorillas (*Gorilla gorilla gorilla*), this subspecies being distributed across southern Cameroon and in areas further south and east in Africa. I estimated the age of the male to be around two years or so and that of the female around 1. The Four's spokesman said they had acquired the animals in Yaoundé, the capital of Cameroon, and insisted they had paid no



Aruna, also on his first day at the Zoo in December 1964. Note what appeared to be burns on his left chest; they healed well, however.



The two maps above show the distribution of the western lowland gorilla (*Gorilla gorilla gorilla*) as well as that of the Cross River gorilla which is found in lesser numbers on both sides of the southern Cameroon/Nigeria border.

money for them. On the left chest of the male were two conspicuous lesions that looked relatively new and raw, with the paler subcutaneous tissue starkly obvious against the dark skin. The lesions looked like burns, as though the end of a burning stick had been dragged across the animal's chest. I also noticed that the male seemed to have some form of weakness in one or both of his legs as he seemed unable to use them with the flexibility or strength one would have expected. It was not possible to assess the gorillas' health more thoroughly at that time but I knew that, if we could get the animals back to the Zoo, full veterinary examination and treatment facilities would be available from the University's Department of Veterinary Medicine.

After half an hour or so with the two young gorillas and their handlers, I asked the Four to accompany me back to the Zoo, together with the gorillas. I explained the importance of a professional check on the animals' health and that the Zoo might not be interested in purchasing the animals if they were found to have any significant health problems. The Four appeared to welcome this suggestion and quickly agreed to accompany me and the gorillas back to the University Zoo and to leave them there with us for a few days. Importantly, this would also provide time for me, together with colleagues at the University, to make contact with appropriate officers in the Nigerian Federal Government, inform them that the two gorillas were in the University Zoo and ask for their comments and advice. It



In January 1965, around three weeks after their arrival in the Zoo, both gorillas were much calmer and were developing a positive relationship with me and the three ape keepers.

was not clear why the Four cooperated so fully in these arrangements but I could only assume that, for whatever reason, they believed what they were doing was within the law and they would be paid a lot of money for the two young gorillas.

I yelled across the compound to Abu and asked him to drive over to where I stood, ready to go, with the Four and the gorillas. I wondered if the animals would allow themselves to be carried into the vehicle without making a fuss or, indeed, if they would remain quiet and still during the journey to the Zoo. Abu opened the sliding door in the side of the vehicle and two of the men, each carrying one of the gorillas, entered and sat in the seats immediately behind the driver; the rest of us sat on improvised seats in the goods area in the back.

As we drove out of the compound and into the road, the small crowd that had gathered at the roadside to watch the gorillas with their handlers now clustered around our vehicle to



Many of the streets of the central area of Ibadan simply teemed with activity.

get a closer look at the apes. I heard more exclamations of 'Oyinbo'. I also heard the word 'Inaki' used a few times and was told later that this is Yoruba for gorilla or baboon.

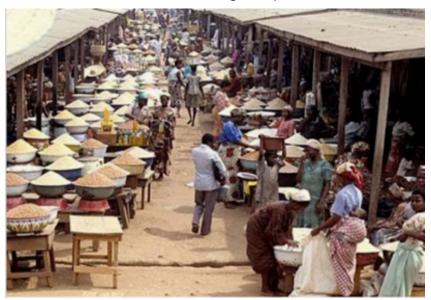
And so we set off for the University campus and the Zoo. From the back of the vehicle I could see the heads of the gorillas above the seat backs in front of me; they were sitting with their handlers while gazing at whatever was going by in the street outside. As I watched those two young apes I couldn't help wondering just how they perceived, how they processed, what was going on around them. They were, after all, far from anything they would have encountered in the wild. Although both animals continued to sit with their handlers as the vehicle bumped along, the male in particular seemed very nervous and kept turning his head and looking out of the windows with great intensity. It guickly became

clear from the way in which the men handled the animals that the handler-gorilla relationships were superficial and fragile.

To get to the University of Ibadan campus we had to drive through the central area of Ibadan, at that time the largest and most highly populated city in Nigeria. Ibadan is located in the Yoruba-speaking south-western area of Nigeria although there were also communities there from other parts of the country. Near the centre of the city the road ran through a large market known as Dugbe market, a place of seething, heaving, sweating humanity engaged in the handling and sale of foodstuffs such as garri, plantain, beans and

rice, as well as clothes, shoes and handbags; there were countless stalls of every size and style.

The journey was going well; there had been no problems so far, although the young gorillas were clearly tense as they sat holding on to their handlers. I had instructed Abu to drive particularly carefully through Dugbe market and to try to avoid the worst potholes. People scurried across the road, often with baskets of yams or garri (roasted granules of cassava) or other items balanced their heads. Loading, on



A small part of Dugbe market, Ibadan. The food-stuffs seen here include lentils, rice, garri and peas.

delivering and transporting a vast array of items were vehicles of every size and description. On the other side of the road I saw a small, open, pick-up vehicle carrying a very large cow, its long horns sticking out far beyond the vehicle on each side and, miraculously, just avoiding the decapitation of several careless motor cyclists and meandering pedestrians.

Then, quite suddenly, while we were still within the Dugbe market area, our peaceful little world of man and beast on wheels came apart. With apparent determination and purpose, and without warning, the male gorilla broke away from his handler, climbed over the back of the seat in front of him and onto the front seat next to the astonished driver, Abu. He then put his hands on the dashboard and lunged forward as though to jump through the windscreen. His head hit the glass with a thump and he fell back onto the front seat. Without pausing, he then clambered across Abu to the open side window, jumped out and disappeared!

Abu immediately slammed on the brakes and the vehicle skidded noisily along the road and came to an abrupt stop. Rather shaken, I looked out of the back window and saw the the gorilla in the middle of the road 15 or 20 metres behind us. He was on all fours but stationary, perhaps recovering from the violent way in which he had left the vehicle. Before this incident, people had been moving busily around us in the market on both sides of the road, but the sudden and unexpected appearance of the small ape drew their attention within seconds. People pointed at him and began to shout. They all seemed frightened and ready to run. Suddenly the gorilla took off and charged, surprisingly, straight into the crowd on the other side of the road where he quickly disappeared in a tsunami of colourful agbadas, bubas, wrappers and other native clothes.

We were all distinctly shaken by what had happened. Abu moved the vehicle and parked it at the side of the road. The female gorilla continued to hold on to her handler as he and his three companions had an animated discussion in their language. It was clear they were very upset by the disappearance of the male gorilla, no doubt because of the money they were expecting to make by selling him. While the man holding the female gorilla remained in the vehicle, the other three ran across the road to the spot where the male had disappeared among the panicking throng; they, in turn, were swallowed up by a crowd still agitated from its close and unexpected encounter with the small, hairy ape, the like of which most would not have seen before.

I remained in the vehicle with my driver Abu, the gorilla handler and the little female gorilla and waited. There seemed nothing else we could usefully do. The gorilla seemed to recover quite quickly from the sudden frenzy caused by the flight of her companion so we waited there in that hot market, with the heat from the tropical sun burning us up. We bought cold soft drinks from a nearby market stall and Abu started to chat up a couple of pretty stall holders nearby. We offered the gorilla some bottled water in a mug and she swallowed it eagerly but daintily.

After fifteen minutes or so had passed I began to wonder what might have happened to the three men, as well as the gorilla, and whether I would ever see the little ape alive again. The people in the market who had fled as he ran towards them had clearly been frightened of him and I feared that it wouldn't be long before some matchet-wielding local farmer or hunter in the market decided to teach him a lesson or even kill him.

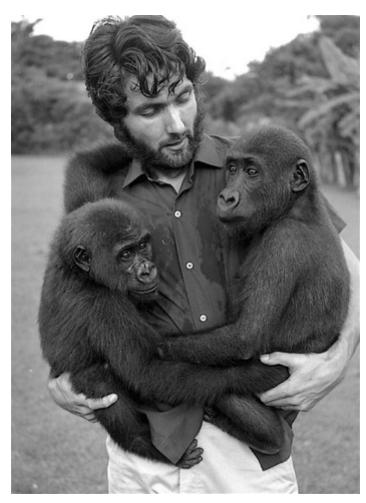
I was feeling distinctly uneasy and decided I should at least secure the safety of the female gorilla by taking her as quickly as possible to the University of Ibadan campus and the Zoo. No doubt I would be able to find out later what had happened to the male gorilla and his handlers and take whatever action was necessary. I was about to tell Abu to continue our journey when there was some further commotion in the crowd over near the spot where the male gorilla and then the three handlers had disappeared. As I looked over in that direction, the crowd gathered there suddenly opened up to reveal - yes - the three handlers, one of them carrying the male gorilla! The men, looking very hot and dishevelled but mightily relieved, walked swiftly back to the vehicle and scrambled inside.

Their spokesman explained that the gorilla had run some distance away from where he had jumped out of the vehicle and had taken refuge in a vacant market stall. Here he was soon surrounded by stall holders and others, some carrying matchets, angry that the ape had frightened their customers away but not quite sure what to do. They were amazed, apparently, when one of the newly-arrived handlers calmly picked the animal up and, with his two companions, hurried away. No doubt the hostile treatment by the crowd had frightened the young animal so that It ran quickly to the only human it knew.

With both gorillas and all four handlers back on board, Abu started the engine and we drove away from Dugbe market and resumed our journey to the Zoological Garden with all possible speed. We arrived at the Zoo around mid afternoon and I asked the Four to keep the gorillas occupied while temporary accommodation was made ready for them. This was to be in one of the Zoo's original animal houses that was now out of use. It was given a rapid but thorough clean by some of the zoo staff and the handlers then left the gorillas there, sitting on the floor on a pile of freshly cut grasses, from now on in the care of the Zoo's ape keepers. Before he left, the Four's spokesman gave me the various documents with which to check the gorillas' importation and legal status and said he would return the following day to check on progress. It seemed that the Four still believed those documents were genuine and would help to facilitate some sort conclusion acceptable to them.

During the three or four days after the arrival of the gorillas, my University colleagues and I made contact with the appropriate officials within the Nigerian Federal Government in Lagos. After initial telephone discussions, they instructed us to confiscate both gorillas and to hold them in the University Zoo pending further investigations. This was followed a day or so later by their statement that the gorillas were currently held unlawfully by the Four and that the two animals should be retained permanently at the University of Ibadan Zoological Garden. Cameroon being the alleged country of origin of the gorillas, the Cameroon government was also informed of events and seemed happy to agree to any arrangements we made with the Nigerian government.

During this period the Four came to the Zoo each day to check on developments. When told each time that we were still awaiting comment and instruction from the Nigerian Government they became increasingly agitated and aggressive. When, the day after the University was instructed to confiscate the gorillas, I informed the Four's spokesman of this, they were all absolutely incensed and the Police had to be called to subdue them and prevent violence. The Police finally took them away and that was the last I ever saw of the formidable Four. This all happened in December 1964.



Both these photos were taken in May 1965 and show a marked improvement in the gorillas' physical condition and appearance compared with when they were brought to us in December 1964. Top image shows Imade on left; in the lower image she is on the right.

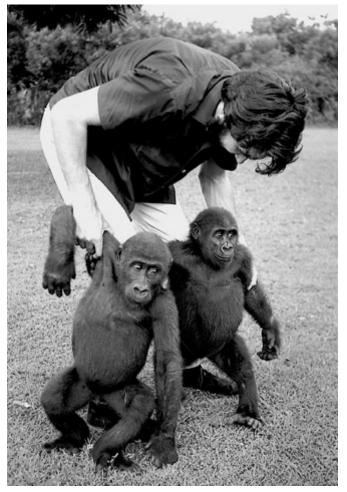
appalling treatment at the hands of the frightful Four could only have inflicted further cruelty and trauma on the bodies and minds of these two young primates.

I found it distressing at that time to watch the gorillas, now in temporary (but perfectly adequate) accommodation in the Zoo, sitting or moving around with limited contact between them, without focus or energy, their faces anxious, their bodies stiff. While the vets diagnosed no serious or urgent physical health problems, there was general concern over their mental well-being. It was agreed that the animals' most urgent need now was stable, routine, sympathetic daily management by carefully selected zoo keepers.

I am pleased to say that both young gorillas responded well to a daily routine which

I shall now give a brief account of how the gorillas settled down after their arrival at the Zoo. I say brief because the main focus of the final part of this story will be on the events and circumstances leading to the construction of a new ape house.

The day after their arrival at the Zoo the gorillas were examined, as far as was possible or desirable at that time, by veterinarians from the University's Department of Veterinary Medicine. During those first few days both animals continued to avoid physical contact with me and the three ape keepers and even tried to bite us if we attempted to touch them. Uncertainty remained about just when and under what circumstances they had been separated from their respective mothers and social group in the wild. However, their behavior now was obviously linked to these events and the absence of the complex natural support the young gorillas would have received had they been raised in the wild or even in a well-managed zoo. Their recent





Both photos were taken in 1965 when we started to carry the two gorillas to a nearby field most days for exercise and play. Our young male chimpanzee, Zimbo, frequently joined these forays (see above). The gorillas gained self-confidence and began to beat their chests with more enthusiasm (see Aruna below). included many hours of close attention from the three designated zoo keepers and myself; the keepers were Michael lyoha, Augustine Udoh and Nicholas Eze and they did an outstanding job in settling the gorillas down and helping to create a new sense of security and order that improved their lives in very many ways. The gorillas' behaviour changed guickly and significantly. Within two or three weeks they had formed positive and increasingly reciprocal relationships with their new human carers and were feeding well on a balanced diet. The zoo staff named the male gorilla Aruna, pronounced Ah-roon-ah. and the female Imade, pronounced Ee-



<u>mah</u>-deh. It was a joy to see the two young apes begin to emerge from their dreadful earlier experiences and develop self-confidence and a relaxed curiosity in what was happening around them.

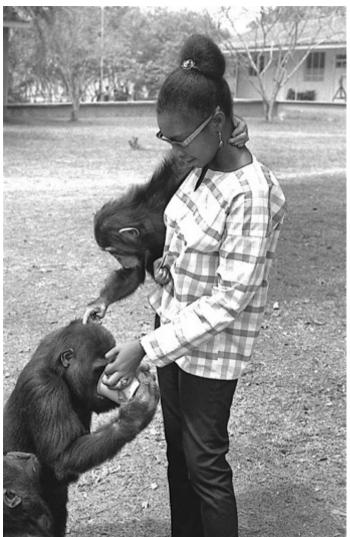
The unexpected acquisition of the two young gorillas gave rise, quite properly, to a discussion within the University concerning their long term future. Should they remain in the University Zoo or be sent to one or more zoos overseas, perhaps for assimilation into an international captive breeding programme? For a number of reasons - see further comment below – it was decided that the gorillas should remain at the University of Ibadan Zoo.

There then arose the inevitable discussion of how they were to be accommodated in the Zoo, both in the short term and for what might be many years to come. I am pleased to say that the University later provided funds with which to construct an entirely new building, or ape house, for the gorillas and for our chimpanzees. This decision, made with backing from the Vice-Chancellor and the approval of the University's policy-making bodies, proved to be hugely significant and helped to establish new standards and objectives for the Zoo. Before the construction of our new ape house could commence, we needed to establish objectives and draw up a detailed design. We needed to be sure, for example, that the building would provide for the long-term needs of the apes, be escape-proof, would meet the research objectives of the University, would inform and educate zoo visitors about Nigerian wildlife and raise the public profile of the Zoo and the University. I had already become aware that most Nigerians had little or no opportunity to observe large, indigenous and in some cases potentially dangerous wild animals in a secure environment where they would feel safe, be able to relax and view the animals at their leisure. The Zoo had the potential to provide such a facility and I kept this potential always in mind.

I decided that the new ape building should include two outside enclosures, one for the gorillas and the other for our group of chimpanzees. Arising from this decision would be the need to incorporate a barrier that prevented the gorillas and chimpanzees from escaping from their respective enclosures and onto the University campus.

One of the difficulties I faced at that time was that, in West Africa, I was far away from other zoos and zoo people experienced in accommodating and managing apes in captivity. Communication by email, with its wondrous capacity to bring the world to one's computer screen in the blink of an eyelid, was still only a rumour. However, I pledged to take absolutely no chances regarding the effectiveness of the proposed ape barrier and the

security of staff, students and others who lived and worked on the campus. The University campus was a busy place, with people moving around at all hours. Situated guite close to the Zoo was a students' hall of residence. staff houses and buildings housing some of the science departments. Not much further away was the Senior Staff Club, used by the University's academic, technical and administrative staff from Nigeria and from countries all around the world; it was where members went to drink cold beer, play table tennis, swim, argue, play liar dice and dance to some of the most energising live music on the planet. The thought of the gorillas escaping as adults onto the campus, finding their way into the Senior Staff Club and running amok was sobering indeed. (On the other hand, as the Social Secretary of the Club, a role that involved the occasional sorting out of members' disagreements and other irritating nonsense, I confess there were days when I took quiet delight in imagining a fully grown Aruna wandering around the campus and stomping angrily into the senior staff club, jumping into the swimming pool with loud beats of his chest and terrified swimmers shooting up out of the water and into the air like a bunch of dolphins).



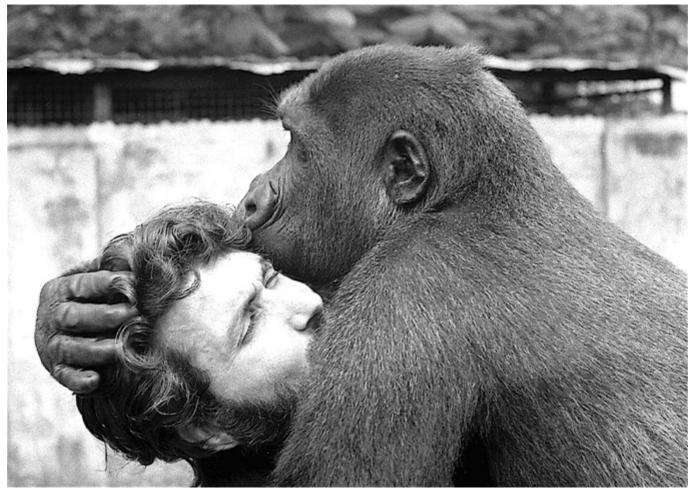
A zoo visitor helps to give Imade a drink while also holding one of the Zoo's young chimpanzees.

I was aware that barriers of different design and type were being used for great apes in zoos in a number of countries. Such barriers included traditional metal bars or mesh which I rejected as being unsuitable for the University of Ibadan Zoo. Another well tested barrier was a high, smooth, unclimbable brick or stone wall but I suspected that, during the hot dry season in tropical West Africa, such a wall might reflect an uncomfortable level of heat on the animals or the visitors or both. Yet another barrier type, again used with apparent

success by a number of zoos, was a concrete-lined, water-filled moat. I concluded that, in principle, the latter was my preferred type of barrier as this would allow visitors to observe the animals easily, directly and at roughly the same level as themselves, with no intervening bars or mesh and without high, heat-reflecting walls.

Despite these important advantages, however, the concept of a water-filled moat still made me feel a little uneasy. Was I absolutely certain that gorillas and chimpanzees couldn't swim or somehow make their way across narrow stretches of deep or relatively deep water? After all, a concrete moat would not be cheap to construct and, if it was built and didn't fulfil its primary purpose as an ape barrier, the consequences were likely to be serious for a number of reasons. I was aware of reports of wild individuals of at least one of the four gorilla subspecies having been observed standing in water while gathering food but, importantly, not actually swimming. During my observations in other zoos, gorillas and other great apes had appeared to pay little or no attention to the water and simply avoided it as they moved around. I made further enquiries and from most sources received assurances that water had, indeed, proved to be an effective barrier for these animals. One or two responses, however, expressed caution or were ambiguous and there were unconfirmed reports of apes getting out of their depth in water and drowning.

By coincidence, one of the reasons for my caution in this matter was that, at around that time, there was an unexpected but relevant development in the University of Ibadan Zoo - in my own backyard. Let me explain. From a few weeks after the arrival of the gorillas in the Zoo, by which time they had lost much if not most of their earlier aggression and



Help! Aruna is demanding attention! We were walking on the field just outside the Zoo when he suddenly decided he wasn't going back to his temporary accommodation – and that I was not going anywhere either. All perfectly harmless but one had to be able to make good judgements! 1968.

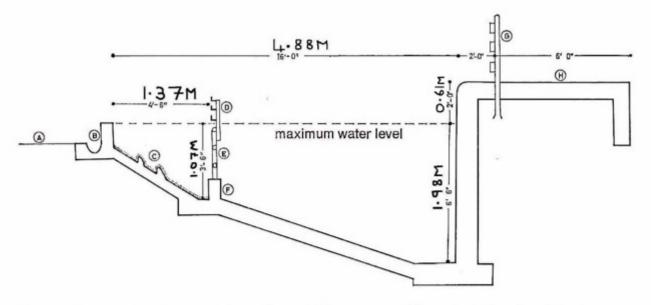
difficult behaviour, the four of us routinely handling the animals shared the job of taking them for exercise on a large, mown grass field just outside the Zoo. This happened two or three times each week and we usually included one or two of our young chimpanzees in these little adventures. We simply entered their quarters, picked them up and carried them the short distance through the Zoo to the grassed area where we put them down and encouraged them to move around and explore. They never attempted to run away from us. Rather, they seemed to enjoy just being on the grass and would perhaps come to sit with me or the keepers for a while, or drink their special, health-enhancing daily drink from a mug. Sometimes they engaged in a harmless free-for-all, with arms and legs flailing in all directions. During such encounters both gorillas and chimps seemed particularly relaxed and displayed what could only be interpreted as immense contentment.

At the edge of the grassed area where we took the gorillas and chimps was a water tap with attached hosepipe. As the animals exercised near the tap one day, one of the ape keepers casually turned it on and, using the hosepipe, aimed small spurts of water at the gorillas and chimps as they moved around nearby. When the first drops of water landed on the two chimps they retreated immediately until they were out of range; it was clear they disliked having water on their bodies. The gorillas, on the other hand, appeared to be intrigued by the water and made no attempt to move away. The following day we took all four animals back to the same spot and turned the water on again. Again the chimps kept out of hose-pipe range whereas the gorillas prodded, slapped and played around with the water, Aruna even picking up the hosepipe carefully and examining the emerging liquid. Over the next few weeks and months both gorillas played around regularly with the running water, sometimes becoming thoroughly soaked but apparently enjoying the experience more and more. The chimpanzees, on the other hand, retained their strong dislike of any contact with water - a dislike, incidentally, that remained with them permanently.

I found the behaviour of the young gorillas surprising. In response to my enquiries so far I had heard from a number of sources, most of them indicating that both gorillas and chimpanzees in zoos had shown dislike of water and, as I have already pointed out, that water had been used successfully as an ape barrier. Of course, our gorillas' interest in playing with water from a hosepipe didn't necessarily mean they would enter standing water in a future moat, even if given the opportunity. However, their behaviour raised niggling but significant doubts regarding my plan for our new ape building.

After further thought and discussion, I decided to go ahead with a water barrier. I would design it myself, using my own experience, judgement and information.

The drawing on page 14 was what I came up with. From the inner edge of the moat, ie. on the ape enclosure side (A), the animals would have direct access to an adjacent, relatively shallow area of water bounded on its far side by underwater rails (E) topped by an electrified wire barrier (D). The underwater rails and electrified wires would prevent an ape from moving further out and into the deeper water. The rails could also be used as underwater handholds. There was also an above-water handhold (B) along the inner edge of the moat. If one of the animals wanted to paddle along the inner edge of the moat or perhaps rest on the moat floor while partially immersed in the water in that inner section, a non-slip foothold was provided by the roughened surface of the moat floor together with two elevated ridges (C). Should the animal somehow manage to get over or through the dual barrier D and E and into the outer, deeper section, there would be no hand or foot holds; the gorilla would be out of its depth and would drown.



Cross section of moat of the gorilla and chimpanzee exhibit at the University of Ibadan Zoo.

- A. Level of ape compounds
- B. Gutter, draining compounds and moat
- C. Moat floor, inner section, with roughened surface and two 2 cm (11 in) raised finger holds
- D. Support with three insulated hooks for electrified wire barrier
- E. Support with three underwater rails
- F. Wall 30 cm (12 in) high
- G. Visitors' safety rail
- H. Visitors' viewing path.

Construction of the main building for the new ape house was completed early in 1970; we moved the gorillas and chimpanzees into it pending completion of the moat and the outside enclosures a few weeks later. While I was delighted that the project had gone well so far and had been completed on time and on budget, I confess I became increasingly anxious as the time approached when the effectiveness of the moat would finally be put to the test. Would the moat work? After all the time and effort spent estimating effective angles, dimensions, water depths, the position of the electrified wire barrier, etc. to meet a host of unusual requirements, would it all come together and do the job as an ape barrier, or would the gorillas or chimpanzees find a way of crossing it? Or would they drown?

My hope and expectation was that, once they had experienced an electric shock, the apes would not attempt to touch the wire again. I couldn't be sure, of course, so decided to first test the effectiveness of the electrified wire before moving on to the potentially more difficult matter of how the animals would relate to standing water.

So, one March morning in 1970, we were ready at last to release the gorillas into their new enclosure for the first time! To ensure easy access for the animals to the electrified wire, I reduced the moat water level temporarily so that, in the inner section, the water was just a few centimetres deep, thus also eliminating any possibility of the animals drowning in that inner section at that early stage.

I should just mention that, although the drawing of the ape moat above shows three electrified wires, one above the other, at the time the apes were first released only one



Left: Work in progress in 1969 on the water-filled moat that would form an ape barrier around the outside gorilla and chimp enclosures. Right: Completed ape moat.

wire was in place. For reasons that will become clear, however, I soon decided to increase the single wire to three. The electric current for the wire barrier was supplied by a device intended to power an electrified cattle fence; the shock it gave was effective without being life threatening.

Together with several zoo keepers, I now stood on the far side of the moat - the zoo visitors' side - ready to watch the proceedings. We started with the gorillas and, when everything seemed ready, I gave the instruction for the door between their indoor accommodation and the new outside enclosure to be opened.

Within a few seconds Aruna appeared in the doorway, closely followed by Imade. They paused, looked out into the enclosure and emerged. They began to move around, very slowly at first, and explored the enclosure with great deliberation. For the first half hour or so they walked around the inner edge of the moat but didn't move down into it. However, during this period both gorillas visibly gained confidence and began to relax and beat their chests.

They then started to explore the moat, moving with care down to the temporary low water line from where they could touch the electrified wire. While Imade seemed nervous and simply stared at the exposed rails and electrified wire, Aruna soon reached out and grasped the wire with one hand. His reaction was instantaneous; he ducked, as though he had been attacked from above, screwed up his face and ran back up to the edge of the moat where he sat staring across at the wire. After another ten or fifteen minutes he moved slowly back down into the moat and again reached out towards the wire with one hand. This time, however, he moved with extreme caution and each time his finger tips seemed about to touch the wire he withdrew his hand. He repeated this little routine several times, each time edging a little closer to the wire. Finally, his fingers made contact and he received his second shock. Again he ducked wildly, screwed up his face and retreated rapidly up the side of the moat and to the far side of the enclosure.

I am delighted to say that, although Aruna went back to the edge of the moat and stared at the wire on several occasions during the next two or three days, he then seemed to lose interest in it and was never again seen attempting to touch it.

As I expected, Imade took a little longer to touch the wire for the first time; her greater natural caution may also have been increased by Aruna's earlier encounter with the wire

which she had observed. However, she soon followed suit, received a shock and rushed back up the side of the moat and across to the other side of the enclosure, at the same time uttering a low whimper I had not heard from her before. Having received this single shock, Imade, as with Aruna, was never again seen attempting to touch the wire. Later on, as both gorillas began to enter the water in the moat, they became adept at moving routinely very close to the wire without making contact with it .

To be on the safe side I decided to leave the water at the low level for a few more days so I could be sure that both gorillas had learned to keep clear of the wire. I placed one of the zoo staff on duty to watch the animals throughout the day and to sound the alarm if staff were suddenly needed for some reason. Although I thought it extremely unlikely that Imade would make any further attempts to touch the wire, I was less confident about Aruna; it was already clear that he was much calmer, more curious and more resourceful than Imade when faced with anything strange or challenging.

A few days after the Great Electrified Wire Test I arranged for the water level in the moat to be raised for the first time to normal or working level, ie., just below maximum level (see drawing page 14) and I gathered to watch the gorillas as they were released into their enclosure. As Aruna and Imade emerged from their indoor quarters I had little idea of the developments that were to take place that day and during the coming weeks and months. The gorillas noticed almost immediately that the moat was full of water and went over to take a closer look, with Aruna making the first moves as usual. He reached out from the edge of the moat and put his hand rather carefully into the water and began to splash around and play with it. In this he was closely followed by Imade.

Things then moved with surprising speed. Within just a few days both gorillas were actually immersing themselves in the water! They sat on the non-slip floor of the inner



Within days of the gorillas being released for the first time into their new enclosure early in 1970, with the water in the moats finally at operating level, both animals spent some time just sitting in the water. The rough surface of the moat floor, together with its raised ridges (Imade can be seen above using these) provided secure hand and foot holds. See also the drawing of the moat section on page 14.

moat, with water up to their chins (see photo below) and, as their confidence increased, they began to beat at the water with their hands, apparently delighting in the variety of noises they could produce. They would suddenly stand up, wait for the water to pour off their bodies and then beat their chests with great enthusiasm before submerging again. With water up to their chins they were relatively buoyant and soon began to propel themselves along the moat in an upright, sitting position by pushing or pulling on the underwater rails or moat floor with their hands and feet. Both gorillas avoided contact with the electrified wire at all times. Their prowess in the water developed rapidly. It was only a couple of weeks before Aruna was able to

launch himself with a kick from the moat floor and move forward in the water in a horizontal breast stroke position, with arms straight out in front of him, before slowing down, sinking slightly and kicking off from the moat floor again.



Left: Aruna has just run diagonally across his enclosure, jumped and is about to land in the water with a considerable splash - which he enjoyed! Right: Augustine, one of the three ape keepers, with both gorillas.

Both animals had already experienced water from a hosepipe, of course, but the speed with which they came to terms with this comparatively deep, standing water and learned how to use it and relate to it was astonishing. Both gorillas soon learned to run across their enclosure at an angle to the moat and either leap diagonally into the water in a tremendous belly-flop or twist around at the last moment and plunge in backwards, all the time being careful not to submerge their faces. They took turns in chasing each other along the raised inner edge of the moat (B), the one behind attempting to push the other into the water.

Within a few days of the moat water being at normal level, the first significant and unplanned problem arose. Aruna discovered that, while standing in the inner section of the moat adjacent to the underwater rails he could, by leaning forward and adopting a horizontal position with his chest and belly tightly against the top rail, just about squeeze through the gap between the rail and the electrified wire above it and straighten up on the other, deep water side without receiving a shock. Fortunately, he always held on to the top rail after moving across to the deep section and thus always remained in relatively shallow water.

He followed this by developing the ability, while hanging on to the top rail from the inner section of the moat, to lower his body and legs underwater and across between the top and centre rails to the outer, deep section until only his head was left above water. Then, very quickly, he pulled his head down beneath the water so that he was entirely submerged and surfaced again, grimacing furiously, in the deep water section of the moat on the other side of the rails / electrified wire barrier.

Having crossed over to the deep section using one technique or the other he then walked sideways along the moat, always hanging on to the top rail as he did so. I had little doubt that, had he lost his grip on that rail, he would have slid or rolled down into the deeper water and drowned - which is, of course, exactly what I had planned should happen! To deal with this unexpected but temporary situation, I placed some of the zoo keepers on immediate gorilla watching duties throughout the day, and with a rescue plan should either gorilla get into difficulties in the deep water.

It was interesting that, having crossed to the deep water section of the moat as I have described, and then moved along the moat while hanging on to the top rail, Aruna's demeanour was always conspicuously upbeat and exuberant, as though he considered he had triumphed over a difficult challenge. He always returned to the inner section of the

moat within a few minutes by jumping clumsily back into it from the top rail at the bend of the moat, where the electrified wire ran somewhat inside the curve of the rail instead of being directly above it. When and how he taught himself this quite difficult manoeuvre in so short a time, and without being seen practising it, I simply don't know! Aruna's self-confidence, his persistence and quiet concentration on what he was doing, and indeed his ability to experiment and make progress, was fascinating to observe.

Within a day or so I organised minor modifications to the electrified wire supports and closed the gaps between the underwater rails with cable so that Aruna could no longer

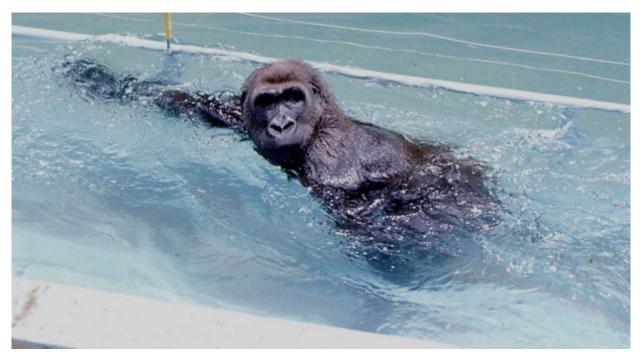


Patrick, above, was in charge of maintaining the everyday condition of the moat, including the pump and filtration system that kept the water clear and free of infection. Patrick thus swam in the moat quite often and so was in regular close contact with the gorillas. Particularly interesting were Aruna's apparent attempts to keep up with Patrick as the latter swam alongside in the deeper part of the moat. It seemed likely that at least some of Aruna's postures and movements in the water were attempts to copy Patrick's swimming movements.

move across to the deep section. These modifications put a complete stop to his new tricks after which the entire system of moat, electrified wire etc., worked perfectly and continued to do so, even when the gorillas were adult.

I should make brief mention of how our small group of young chimpanzees of various ages responded to being placed behind a water barrier. The chimps were moved out of their old accommodation to the new ape house at the same time as the gorillas; they were accommodated in the other half of the ape building and were enclosed by a moat of exactly the same design as the moat for the gorillas. The response of the chimpanzees to the moat and the water in it was utterly different from that of the gorillas. The chimps demonstrated a strong and unequivocal dislike of water at all times and in all circumstances and would rarely even place a foot in the moat water. With the experience thus gained, the design of a water barrier for our chimps alone would have been an altogether more straightforward task.

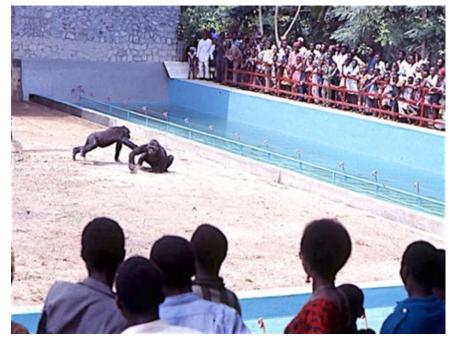
Even before the new ape building opened to the public in March, 1970, it became clear that we would need to have someone on constant duty throughout the day to prevent visitors throwing items into the enclosures or otherwise misbehaving. Another new role was the daily maintenance of the filtration equipment I had installed in order to keep the water in the ape moat properly filtered, chlorinated and free of infection. I hoped we might find a suitable person to take on both sets of duties and I put the word around about this new vacancy. I soon appointed Patrick who turned out to be ideal for the job. In addition to his other attributes, Patrick could swim and, from the outer, deeper section of the moat, He he built up close relationships with both gorillas over several years. Patrick sometimes liked to reach out across the top of the electrified wires and touch fingers with one of the



Can he swim? Is he swimming?

gorillas, usually Aruna; or, as Aruna lay back on the moat floor and extended his feet down through the water and across the underwater rails toward Patrick, Patrick grabbed his ankles and they had an often very strenuous underwater rough and tumble.

As Aruna's confidence and ability in the water increased, he modified his limb movements slightly. I could not be sure whether he was imitating Patrick's swimming movements or whether he had discovered for himself that, by making these small changes, he could travel further forward through the water. Interestingly, Aruna began to position himself



The young gorillas Aruna and Imade attracted large numbers of zoo visitors of every age, class and profession; they were able, often for the first time, to stand and observe indigenous wild animals in complete

alongside Patrick as the latter swam along the moat on the other side of the electrified wire barrier. The two of them sometimes looked as though they were racing each other (see photos page 18). In retrospect, maybe they were...

So, the question really remains - could the two young gorillas in this story swim? The only answer I can possibly give is no, but I believe some elaboration would be helpful.

I have pointed out above that, while Aruna often appeared at first sight to be swimming, with arms extended before him as

he moved forward through the water, this forward movement was generated by kicking off with his foot from the roughened floor of the inner moat, or pulled or pushed on the underwater rails. Each thrust carried him forward by anything up to a metre, perhaps even more. As each forward movement slowed and he began to sink, he regained contact with the moat floor or the underwater rails, and pushed/pulled himself off again. When the gorillas were very young and small, the design of the inner section of the moat made it virtually impossible for them to become dangerously out of their depths; it was also just shallow enough to discourage, or even prevent, attempts to swim - there was simply not sufficient water depth to support this. Whether Aruna or Imade would have learned to swim, in the full sense of the word, if given access to deeper water I cannot say.

I would welcome any information or comment on what I have written above, but I am curious to know why there seem to be few, if any, records of captive gorillas kept behind a water barrier that have shown the same level of interest in experimenting with water as was shown by Aruna and Imade. Was it that the experiences these two gorillas had with water when they were very young in some way provided an exceptional basis for the further development of their relationships with water? I have fairly recently seen a video of an orang-utan and, separately, a chimpanzee apparently swimming underwater, but I would question other videos I have seen that claim to depict a swimming gorilla. I have also seen a video of captive gorillas playing around in shallow water. But have there been



By 1973 Aruna was beginning to develop some of the physical features of an adult male gorilla. It was soon after this that I decided to put an end to me or the keepers entering any part of the gorillas' accommodation while the animals were present. A very difficult decision! But as the gorillas grew ever more challenging with time - a natural process - I knew that an incident was likely to occur that would probably damage the man/gorilla relationship permanently and I wanted to avoid this; we were thus able to maintain the relationships, albeit through metal bars.

escapes, or attempted escapes, by captive gorillas or indeed other great apes across a water barrier that have not been made known?

I resigned from my post as Zoo Director at the Zoological Garden, University of Ibadan, in September, 1979. Aruna and Imade were both doing well when I left. Aruna died in 1995 when he would have been approximately 33 years old and Imade in 2009 when she was around 46 years old. I was told that the water moat barrier around the two ape enclosures had continued to work well and effectively after I left. I am delighted to be able to say that during my period at the Zoo from 1963 to 1979, first as Curator then Director, public interest in the Zoo grew by leaps and bounds and it became a well-known and popular public attraction. The University administrators separated it from the Department of Zoology and formally redesignated it a Public Service Unit, a change that had my full support. As such the Zoo became responsible, under a newly appointed Director (yours



The new main visitors' entrance to the University of Ibadan Zoological Garden.

truly), to a newly-formed Zoo Management Board chaired by the Dean of the University's Faculty of Science. In 1963 the annual visitor attendance figure was somewhere around 30,000 or 40,000. By 1970 it had risen to 158,000 and when I left Nigeria in 1979 the figure was just under 250,000, more visitors than attended any other public attraction of any kind in Nigeria. The Zoo became a wildlife centre where ordinary Nigerians could observe wild creatures at their leisure and in complete safety, handle species which were were normally regarded with fear such as snakes and, hopefully, learn something about the natural world and its conservation.

It was only after I set up my website a few years ago featuring my 16 years' work at the University of Ibadan Zoo that I started to receive emails from Nigerians I had never met as

adults but who had lived as children in Ibadan when I was working there. The writers, often now working in countries other than Nigeria, introduced themselves to me as the young children who had visited the Zoo at that time, often with their parents or in a school party.

Many of the things they said about the Zoo and their experiences there when they were children came as a complete surprise to me and, I have to say, gave me enormous satisfaction as I looked back at that period of my life. I send my greetings and best wishes for the continued positive influence in Nigeria of the University of Ibadan Zoological Garden. Thank you to all those who have contacted me - see 'Voices from the Past' elsewhere on this website.

Bob Golding

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