

Chapter 3

A SECRET SHARED AND A MISSION DEVISED

The prof had always believed that there was potential to develop the brains of African Greys, but he had never imagined the possibility that they might one day have a level of understanding equal to an adult human – and be able to vocalise to the same extent.

He reached the point where he knew he had to involve someone else who could be trusted and he decided to bring Zoe into his confidence. He had watched Zoe blossoming into a superb researcher and had witnessed her delivering talks about her work and the two of them had written a couple of joint academic papers together.

One day he asked her into his office, with me sitting on a floor-standing parrot perch beside him. He asked her to sit down (knowing he was about to deliver quite a shock) and swore her to secrecy about what he was going to reveal in respect of one of his experiments. He also asked that she did her best not to show too much reaction to what he was about to say as it was possible to see into his office from the lab and another researcher was working there at the time.

He first of all explained about Winston and Clemmie, what treatment he had given them and the incredible results that had been achieved. That was mind-blowing enough for Zoe to absorb – and her eyes her widened significantly when he did – but, as the two old parrots weren't actually there at the time, she could only try and imagine what their language skills and levels of perception were like.

Then came the even bigger 'reveal'. The prof told her: "After much consideration, I conducted the same experiment on Marty here and the results have been even more amazing. He has progressed even faster than the other two". He explained he had given Winston, Clemmie and me the code names of 'Triple B – 1, 2 and 3', the 'Triple B' – standing for '**B**ig **B**ird **B**rain'.

Zoe had observed him spending an increasing amount of time with Greys in his office recently, but had not thought anything of it. And male African Greys all look alike. The ring numbers could differentiate one bird from another but, as she had not been involved in the prof's current work stream, she had not been monitoring what birds he was working with and had assumed that the prof was bringing in different parrots each day and not the same one. The prof's work schedule simply recorded that he was currently working on language skills for African Greys.

It was perfectly normal to observe him chatting away to one of his charges. But she was not expecting what came next. He turned to me and said: "Marty, the time has come to share our secret with Zoe. I told you I was going to do this and you may now reveal to her what you are truly capable of but, before you begin to speak, please remember that if anyone else comes into the office, you are to stop talking and revert to being a normal parrot. Please begin by telling Zoe what we were discussing shortly before she came in".

I began talking, in the prof's voice, and said: "The prof was just explaining to me about elections and how you all vote for people you want to represent you in government". Zoe threw her head back and laughed. She said to the prof: "You are having a joke, aren't you? You have learnt to throw your voice like a ventriloquist, haven't you?"

The prof said: "No, I have told you the truth. This parrot's brain power has expanded exponentially and, along with it, the ability to absorb information, reason, analyse and use normal language. He even understands humour.

"What I will do now is to go out into the lab and distract Matt (the other researcher) and leave you here talking to Marty – about whatever you want to talk about. I will come back in 10 minutes or so".

He got up and did what he said he would do and embarked on a discussion with the other researcher, ensuring that he was facing his office and 'holding court' and therefore the researcher had his back to it.

Zoe looked flummoxed and seemed to be temporarily speechless, so I took the initiative. I said: "I still have a lot to learn but I am sure that, with your help and the professor's, I can do useful things". Zoe could see the prof talking in the lab and at first spoke very nervously and incredulously to me and then slowly started asking questions.

She asked: "Do you understand what has happened to you?". I said: "I do – the prof has explained everything. I am aware that I am one of only three 'Big Bird Brains' in the world. And, yes, I also know that the world is a planet in the universe, spinning on its own axis, and that it has multitudinous diverse species of which the humans are the most intelligent".

Zoe's eyes were the size of saucers by now but her professional

curiosity was kicking in. She asked: “Do you know where you are located?” I said: “I do. I am in a laboratory attached to the British Zoo in London, England – and London is the capital city of England with a population of well over eight million people”.

She asked: “Do you know who I am?” I said: “You are Zoe Cottrell and you are a scientist. Like the professor, you study bird and animal behaviour”. She then asked “How much can you recall of your life before you became a ‘Triple B’?” I said: “I remember I was perfectly content although I was not as confident as I am now. Life was interesting and varied. I particularly enjoyed playing with the toys the prof designed. But, whereas my recollections of what has occurred since my treatment are crystal clear, earlier memories are a bit foggy”.

After about 10 minutes, the prof came back in and sat down and said: “Now do you believe me?” “Yes”, said Zoe. “I have never been so overwhelmed, so elated, so beside myself. This is like a dream. I feel as though I have just entered a science fiction film set!”

“It still feels unbelievable to me”, said the prof. “But the fact is that this incredible asset is now available to the world – and it can fly! We are professionals and we now have to apply ourselves to what we do with Marty. How can we make best use of him?”

Once she had caught her breath, Zoe said she knew exactly what task could be set for a super intelligent African Grey – helping to save the Greys from extinction in their central African homelands where they are being trapped in their thousands by poachers. “If I can find a safe haven, Marty could lead Greys to it. Let me try to make that happen”, she said. Zoe spoke with great passion, having witnessed the devastation caused by poaching – of all kinds – growing up in Africa. “It has been a dream of mine ever since I first acquired my own African Grey parrot as a child and realised what fascinating and intelligent creatures they were, to not only

work with them but to protect them for the future. They are very special”. The prof could not agree more and promised to help her bring about her dream.

Both were only too well aware that the clearing of large areas of forest to grow crops like soya and palm oil and to mine extensive natural resources meant that many species were being seriously depleted and an ecological disaster had been gradually unfolding for years. And then, added to the intentional impacts wrought directly by mankind’s actions, there were the unintentional effects of climate change which were changing weather patterns and causing more droughts and various unpredictable weather events.

However, whilst action on climate change and forest clearances would have to come from politicians, (who would have to be persistently lobbied by the scientists), there was now something that they as scientists could do about re-locating an endangered species.

The current state of affairs is that Greys are popular pets all over the world, most particularly in Asia and the Middle East, because of their ability to mimic the human voice and their longevity. They command a high price and the demand for them is unlikely to alter.

Greys have proved to be particularly vulnerable to exploitation because their highly social nature means they aggregate in their African homelands in large concentrations to roost, feed and nest, meaning they can be trapped with great efficiency. Now that they are recognised as being endangered, anyone acquiring them is supposed to have a certificate to say they have been bred in captivity. But, many of the young birds made available have been bred from birds that have been illegally taken from the wild and large, natural, populations of Greys have become increasingly scarce.

Most of the parrots at the zoo have been bred there but some have been accepted from families who have realised that the birds demand

FACTS CHECK

Climate change impacts on African biodiversity

This is how the 'One Planet' summit, sponsored by the World Bank and held in Kenya in March 2019, set out the challenges being faced:

"The African continent is experiencing a dramatic loss of biodiversity. It is estimated that by 2100 climate change alone could cause the loss of over half of African bird and mammal species as well as trigger a 20% - 30% decline in lake productivity (the plant and animal life produced by a lake) and a significant loss of plant species. Even more immediate are the threats to African biodiversity from natural habitat loss and degradation (especially from agricultural expansion), direct over exploitation of wildlife and fishery species (including from illegal hunting and trade) and the spread of certain non-native invasive species. This loss of biodiversity affects livelihoods, water supply and food security and lessens resilience to extreme events".

<https://www.worldbank.org/en/news/feature/2019/02/14/biodiversity>.

A year later a new academic study showed that climate change could lead to a sudden loss in biodiversity in Africa sooner than predicted earlier. Written by a trio of scientists and published in April 2020, it predicted a possible "catastrophic loss of biodiversity" from 2030 onwards, with tropical areas affected the worst:

<https://www.scidev.net/sub-saharan-africa/news/climate-change-to-accelerate-biodiversity-loss/>

<https://www.worldbank.org/en/news/feature/2019/02/14/biodiversity>

In October 2020 the World Meteorological Organisation published a report, 'State of the Climate in Africa'. It recorded how Africa had been warming progressively since the start of the last century and warned that it must get its planning for climate change in order because increasing temperatures and sea levels, changing precipitation patterns and more extreme weather were threatening human health and safety, food and water security and socio economic development:

<https://unfccc.int/news/climate-change-is-an-increasing-threat-to-africa> and <https://news.un.org/en/story/2020/10/1076162>.

more attention than they are able to give or, in some instances, owners have died and other family members can't accept them.

As for me, I have normal parents, who have had several other broods since hatching me at the zoo. The prof called them Bonnie

and Clyde because he noticed they had a playful habit of ‘stealing’ food from each other. I have been well socialised with lots of different people and other birds and animals, taught some tricks and lots of words and learnt to imitate the sounds that many animals make.

I was already quite a good mimic even before the treatment but I only had a limited understanding of what I was mimicking where humans were concerned. It was a different story where other animals were concerned, though. Simply because I have had a lot of exposure to them, I could already communicate with the chimpanzees even before I became Triple B3. Zoe and the prof used to think I was just imitating the sounds they made, but I was actually interacting with them.

Once I could properly analyse and describe what it was like to be an animal to the two scientists, I was able to tell them what was going on in the minds of my fellow Greys and the chimpanzees, including their deliberate resolve to behave mischievously sometimes (sometimes just to relieve boredom) and how, after observing humans, they are often able to predict what they will do.

Both the prof and Zoe already understood that the more intelligent animals and birds make a very conscious decision when it is appropriate to ‘play cute’ in order to soften up humans and to win treats and favours. They, very intentionally, test the outcomes of this behaviour against being naughty and weigh up which achieves the best outcome for them and with whom. But what the prof and Zoe had not appreciated was the extent to which Greys and chimpanzees are attuned to the frailties and moods of other creatures, particularly humans. We adjust our behaviour for each one, especially for children and people who move slowly. Also, whilst parrots copy human speech just for the joy of it, they are very conscious that it pleases the humans looking after them and that it

is likely to reap nice rewards. Parrots register the pleasure derived from their speaking and this gives them pleasure too.

On the matter of copycat talking, I had to express a ‘bug-bear’ of mine to the prof and Zoe. “Why”, I asked them, “do so many zoo visitors insist on saying ‘Pretty Polly’ to us parrots with the expectation that we would repeat it? Does it not occur to them that, if you don’t have lips, the hardest thing for you to try to do is to sound a ‘P’? The prof said that it would not occur to the average individual. He promised to get a sign made that informed visitors which words some parrots could say so that they could try and get a response by calling them out. Hopefully, that would reduce the numbers asking for ‘Pretty Polly’.

My unique insights moved the prof and Zoe’s research forward in leaps and bounds. They have had several papers published in scientific journals, which has made them very happy.

The prof chose me to be his third test bird because I was young and fit, had matured, had demonstrated a high level of intelligence and showed a lot of promise. I was nearly 11 last year when he gave me a tiny amount of the magic potion in my food and then, after a month, another tiny amount. Beforehand he recorded what I could and could not do, captured me on film and took a lot of photographs and he has continued to take films and photos of me, but there has not in fact been any discernible change in my appearance, other than a perceptible increase in my level of confidence, although even that is only obvious to someone studying me.

A year and a bit after receiving my treatment (I am now 12) and I can have intelligent adult conversations with the prof and with Zoe and have overtaken Winston and Clemmie in my linguistic abilities. I can’t read, write or do maths but I listen to ‘talking books’, have a great memory for facts (and even parts of speeches) and love learning new ones.

The funny thing is that the experimental drug has only affected the level of my intelligence, not my natural behaviour. So, I still love having my head scratched and my back stroked and playing with demanding parrot toys which these days I help the prof to design. Also I feel a constant need to chew on things. Which leads to problems sometimes. I have chewed up some pretty important papers before now (and been told off) and nearly gassed myself and the prof when I almost managed to munch through a Bunsen burner cable in the lab, but was caught in time. I can't help it; it is such natural behaviour in parrots. In the wild, we chew on bark.

The other thing that we parrots – especially Greys – often feel the urge to do is to scratch like chickens with one foot, whether that is on the base or on the sides of our cages. Wild parrots often have to scratch the earth in their search for food. It is something that is ingrained in us. Just like the irrepressible desire that Greys have to mimic what people say and sounds that appeal to us. We can't help ourselves – and you can bet your bottom dollar that we will pick up the embarrassing words and noises that people don't want us to repeat! Not to mention the fun we have when we make the sound of phones ringing, microwaves pinging, alarms going off or our owners calling other pets!

Because we are intelligent creatures, we need a great deal of attention, challenges and variety. If we don't get this sort of stimulation then, like some humans, we can turn to self-harming. Many parrots who are bored start plucking their own feathers, although that can also be a sign of other problems.

In my case, I have the opposite problem – that of being deluged with information and attention. But I wouldn't have it any other way. I now fully comprehend that the continent of my ancestors is in serious peril from any number of threats and many of the species that live there are in danger of becoming extinct. That knowledge

fills me with the determination I am going to need to address the situation in some small part. I only wish I could do more than moving fellow parrots to a safe breeding location. But, maybe in time ...

FACTS CHECK

Poaching of African Greys

Industrial scale poaching has caused a catastrophic drop in the number of African Grey parrots. In 2019 it was estimated by World Animal Protection (WAP) that up to a fifth of wild African Greys were being taken for the pet trade each year, a figure which cannot be replaced with natural births, especially as Greys are slow to mature, (they don't reach maturity until they are about five years old). Consequently, they are being rapidly driven towards extinction.

<https://www.independent.co.uk/news/world/africa/african-grey-parrot-poaching-trafficking-wild-exotic-pets-extinct-video-mimic-turkish-airlines-a8761151.html>.

In 2020 'The Ecologist' reported that over three million Greys have been taken from the wild in African countries, both legally and illegally, since the 1980s: <https://theecologist.org/2020/mar/10/covid-19-and-wildlife-trade-bans>. Because of the cruel way in which the birds are handled and transported, often crammed into totally inadequate crates, very large numbers (it is thought possibly as much as 50%) die in transit:

<https://www.theguardian.com/environment/2016/oct/02/african-grey-parrot-has-cites-global-summit-thank-protected-status>.

International protection for African Greys

In October 2016 African Greys, previously listed as 'Endangered' on the 'Red List' kept by the International Union for Conservation of Nature (IUCN), were moved to the most protected status of 'Critically Endangered' (appendix 1) by the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) which met in Johannesburg. This designation is signed up to by governments across the world to ensure that the international trade in specimens of wild animals and plants does not threaten their survival. It effectively prohibits the commercial trade in wild specimens. In the UK it is now necessary to hold an official (Article 10) CITES ownership certificate from the Department for Environment, Food and Rural Affairs (DEFRA) as proof that specimens are captive bred before the birds can be commercially traded:

<http://apha.defra.gov.uk/documents/cites/cites-news030317.pdf>.