Chapter 1

WHAT AM I AND WHICH PEOPLE MAKE MY EXTRAORDINARY LIFE POSSIBLE?

Tam a parrot. A Congo African Grey parrot. But I'm no bird brain.

In fact, I am rather special. My given name is Marty (as in Marty McFly of 'Back to the Future') but I am also **B**ig **B**ird **B**rain **3**, otherwise known as 'Triple B 3'. (My reference to the 'Back to the Future' films will become more apparent when I get onto explaining about 'the professor' later).

To look at, I am a normal specimen of my type. I am a standard size for a Grey – nearly 15" high (38 cm) and about 16 ounces (460 grams) in weight. I have a wingspan of just under 20" (51 cm). My most visible feathers are mainly silver grey in colour, many with white edging, although my wing tips and my beak are black. I have white feathers around my very pale yellow eyes and also beneath my wings and a short bright red tail which can fan out.

If I say so myself, I am a fine feathered fellow and in the peak of health. If I have a failing, it is that I am not the most modest creature on the planet, but then I need to have an extraordinary amount of confidence in order to do extraordinary things. And I have certainly been set up to carve my way through whatever challenges come my way whilst carrying out important missions and experiencing all sorts of amazing adventures.

To explain. Most of my life until recently centred around the British Zoo in London, where I was hatched, and the Research Centre of Parrot and Primate Behaviour attached to it, where I have been studied. But that is not a reason to feel sorry for me. I have been well cared for and chosen to be a unique and special entity. But, before getting into that, I had better fill in some background.

My main handler is a terrific young female academic in her late 20s called Zoe Cottrell who was brought up in Africa where her father still works as a British diplomat (although he is now nearing retirement) and she developed a fascination with wildlife. She is passionate about conserving the earth's natural resources, its habitats, animals and birds. Now based in London, she chose to become an animal and bird behavioural scientist and, as such, she is the definition of a round peg in a round hole.

As well as her serious work, she also has great fun teaching the parrots at the zoo to say entertaining things for the public like 'Let's boogie!' (accompanied by the lifting of alternate legs) and funny one-liners such as: 'Help, they've turned me into a parrot!'

Zoe actually owned an African Grey parrot as a pet during her time in Africa. She had been with her father one day, walking through a market, when a trader had approached them trying to sell a baby Grey in a cage. Zoe, who was eight at the time, begged her father to let her have it. He, of course, knew it would have been snatched from the wild and did not want to encourage poaching but could see it was a young bird that might not survive if it was not taken up by a genuine bird lover.

His child was pleading with him – and what father can resist his little girl when she pleads with him? He bargained with the trader

and he and Zoe went home with the parrot, which Zoe looked after for the next 10 years. Sadly, shortly before Zoe was due to come to university in England, the bird had escaped, due to a careless cleaner. Zoe could only hope that it had found other Greys to live with back in the wild and was OK.

Zoe had been a very conscientious student of animal and bird behaviour, obtaining a first class Bachelor of Science degree, a good master's degree and a doctorate in ethology (the study of animals). Her lab research work, attached to the zoo, involves her testing the brain power of two of the most intelligent animals after humans – African Grey parrots and chimpanzees. So, she spends a lot of her days seeing what tasks it is possible to teach the birds and the apes to do – and recording successful experiments. One of the tricks she has taught a few of the parrots to do is to pick up small change posted via a chute from members of the public which the public then see the birds place in money boxes. The money collected this way then goes towards the upkeep of the birds.

Zoe wears her hair in a no-nonsense bob-cut, which works well for her because she has a pert face and thick hair and she is a nononsense sort of individual. Most of the time she wears spectacles, (which are something of a puzzle to animals who can't resist trying to remove them). She also has contact lenses, although she usually only bothers with them when she is socialising. She can be intense, but she does have a sense of humour and a lovely smile.

Although we parrots can't 'smile' in the same way that humans can, we can express our joy about things with our body language and by squeaking, whistling and calling out and also, when we are excited, we often shake our heads and the pupils in our eyes tend to dilate and expand. There is no mistaking when we are happy!

Zoe has taken to calling me 'Mighty', rather than 'Marty' to reflect my new found status and also her aspirations for me.

She works for the person who bred me, a slightly 'off-the-wall' professor who has probably spent too much time with us animals and not enough with his own kind over the years, but that just makes him more loveable. His name is Leon Keller but most people either call him 'the prof' or Leo. The prof is a wiry man with piercing eyes and a beard, most usually to be found chatting to, training or playing with his charges when not writing bids for grant funding or academic papers or preparing or delivering talks. Outwardly he is a mild mannered and slightly eccentric individual although, as I have got to know him better, I have realised that he does have a steely inner resolve to his character. But, he is a joy to work with as he has such an instinctive way with birds and animals.

The prof's most recent talk, delivered over the internet, was entitled 'The kindness of African Grey parrots'. He recounted an experiment in which two Greys were in separate chambers with a small access hole to a researcher and a small access hole to each other. The parrots had each learnt to accept a token from one researcher and give it to another in order to receive food. When one parrot's access hole to the researchers was sealed up, it gave its tokens to the other parrot so that it could receive the food from the second researcher. The prof concluded: "These parrots exhibit an extraordinary degree of co-operation and selflessness, traits that are rare in the animal kingdom. They are intrinsically motivated to help each other. Only the great apes have been known to behave in a similar way".

Swiss by birth, Leon was born and brought up in Basel, speaking German, French and English. (Basel, on the banks of the Rhine, is at the three-countries point where Switzerland, France and Germany meet). His home was very close to Basel's Zoological Gardens, which the locals affectionately call 'Zolli'. Leon used to spend a lot of time there, especially in school holidays, when he was sometimes allowed to help out. He found all animals and birds totally fascinating and had a natural affinity with most of them.

He wanted to understand how much of the world around them the birds and animals can comprehend – particularly the more intelligent ones – and how they all fit into the world as we know it. He always seemed destined to study the natural world and animal and bird behaviour and this is what he did, doing his first degree in natural science at Cambridge University after he had completed his one-year compulsory military service which all fit Swiss men had to undertake at the time. After Cambridge he continued his studies and researches in London, which he made his home, and settled happily into an academic life, marrying an English woman and acquiring dual nationality.

These days, having already earned his pension, he is a visiting professor at a couple of universities and he concentrates mainly on his 'baby' – the research facility he set up that is attached to the zoo and which is housed in a large log cabin behind the parrot house. Zoe is his only full time researcher but other young scientists pass through on a regular basis either on secondments from a university whilst working on a special project or by arrangement as part of their training. The prof is well known in his specialist field and is an especially popular speaker because of his ability to speak fluent German and French as well as English. He still receives invitations to speak at conferences at home and overseas.

In the past he found it hard to turn down such invitations because they allowed him to mix with other specialists and he always learnt something by doing so. In the early 2020s, though, many conferences went on-line as a result of the Covid pandemic, resulting in big savings for attendees and their employers, but reducing opportunities for personal interaction.

Through teleconferencing, (which I find difficult to comprehend),

the prof can deliver talks all over the world from his office at the lab and he can take part in webinars and discussions with other academics by the same means. But it is not quite the same as mingling on the periphery of a conference and getting into often fascinating conversations with strangers who are carrying out the most interesting experiments or are in the process of developing new theories. The discovery element of those random meet-ups is something he misses.

What he tries never to miss, however, is his annual ski-ing holiday in Switzerland where he meets up with members of his family and childhood friends. Being Swiss, of course, he grew up ski-ing. In less than two hours of walking out of his home in the city, he could be on the slopes in any of four top resorts in Switzerland or one in the Black Forest in Germany and, like most of his teenage contemporaries, he spent his winter holidays as a ski instructor. The pay was derisory but accommodation at the ski resorts was thrown in and all the young ski instructors had a whale of a time. But, even in the Alps, he would be constantly looking skywards to observe the kestrels, the choughs and the eagles. In fact, over the years, he has nearly come to grief more than once by being distracted by birds whilst ski-ing instead of watching where he was going.

When I first witnessed ski-ing on television, I was totally perplexed as to why human beings would willingly strap sticks on their feet and set off (apparently without total control) down snow-covered mountain slopes at risk of life and limb. But I came to understand that, apart from skydiving, ziplining, abseiling and bungy-jumping, (none of which last for an extended period), it is the nearest experience many humans have to flying and, unlike those other four activities, there is in fact more of an element of control. Especially for those who are any good at it.

Nowadays, when the prof goes home, he tries to find time to visit a Swiss animal rescue park which is just an hour away by train from Basel. Whereas Zolli is in the centre of Basel in a (mainly) German speaking canton, the rescue park covers over 50,000 square metres of the Jura country and is in a French speaking canton. It only opened in 2018 and is dedicated mainly to rescue animals, ranging from tigers, wolves and lynx to owls (It has well over 300 rescued animals and birds). It also acts as a retirement home for many animals. It has a birds of prey enclosure and daily falconry displays and it has a large walk-in aviary where the parrots are kept including Greys.

In London the prof works closely with the general manager of the zoo, Dijon Baptiste, a character with a big personality who breezes into the lab at regular intervals. When I was there recently, he burst in with his latest joke: "A man is driving along and sees a parrot in the street. He picks it up and puts it in his car. He spots a policeman and asks what he ought to do with the parrot he has just found. 'Take him to the zoo', says the policemen. A few days later the policeman spots the man again and the parrot is still in his car. 'I thought you were taking the parrot to the zoo', the policeman said. 'I did', said the man, 'and we had such a great time that we are now going to the beach!''' Dijon spun on his heels and left, leaving the prof and Zoe, another researcher (and me) chuckling away.

It is very common for Dijon to ask the prof to see if he can work out what is wrong with an animal that is behaving oddly, if a vet has failed to find a physical cause. The prof will often set up a CCTV in the animal's pen or the bird's cage and watch it from his desk in the lab over a few days. He has also been known to sit in an animal's enclosure outside of public opening times, observing and talking softly to the animal. Sometimes he will recommend that the animal's pen or cage is re-arranged, or new distractions are introduced into it, or the animal is moved to a new pen or cage where it has different neighbours. He has concluded before now that an animal just does not like its appointed keeper. Dijon is always willing to try out the prof's suggestions to bring an animal round because he has so often been right in his assessments. He really does seem to have a second sense where animals and birds are concerned. Dijon often, affectionately, calls the prof 'Dr. Doolittle', especially as he frequently observes him chatting to the creatures he is studying in a natural manner as though they are fellow kin.

Whilst Dijon has overall responsibility for the zoo's animals, the environment in which they live and ensuring that the zoo is commercially viable, some of the parrots and monkeys are the property of the professor, who is also a registered breeder of both. Dijon and the prof have become friends as well as colleagues, but the prof is determined to keep his most recent experiments a closely guarded secret and Dijon is not 'in' on the big secret that is me.

It was the prof who named me Marty and it was he who chose me to be a special case after I had impressed him with my ability to work out puzzles. Amongst other things, the prof devises 'puzzle toys' for us parrots to entertain us and to get to grips with. These involve us working out in what order you have to do certain tasks. For instance, if you pull a lever in one place, then step on another and then twist something else, (in my case with my beak), it is possible to release a tasty treat. Or, he has some little cabinets in which edible delights are stored but they can only be accessed if you work out how to remove plugs or turn certain controls. I have always loved these challenges and will not give up until I have conquered them. In addition, whenever the prof or one of his researchers put in focused time with me, they found that I was quick at picking up tunes to whistle and words and seemed to recognise how some words should be used.

So, it would be fair to say I was already a bit of a star pupil even before I received the treatment that jettisoned me into becoming a super parrot with exceptional reasoning and linguistic skills. I had already benefitted from lots of extra tuition time over and above my fellow Greys at the zoo and would greet everyone with a cheery "Hello, how are you?". I could, in fact, greet everyone these days with a great deal more than that – but I have to keep my special talents hidden except to a very select few.

FACTS CHECK

African Greys: Intellectual accomplishments

Alex, the most famous Congo African Grey (CAG) parrot, was acquired by Dr. Irene Pepperberg, an avian psychologist, from a pet shop where he was picked out randomly. She worked with him for 30 years until he died in 2007, teaching him to recognise over 50 objects, seven colours and five shapes, all of which he could identify vocally. He could categorise, count, understand concepts such as 'smaller', 'larger', 'under', 'over', 'different' and 'zero' and he helped train younger parrots.

Dr. Pepperberg's current star parrot is a 22-year-old CAG called Griffin who, in 2020, out-performed 21 Harvard students in a shell game memory test. The game required participants to mentally track the locations of pom poms hidden under cups that swapped places a number of times. Griffin's accuracy was comparable to, and in some rounds, slightly better that the human adults: https://www.dailymail.co.uk/sciencetech/article-8501505/A-grey-parrot-called-Griffin-humiliates-Harvard-students-beating-memory-test.html.

Also, experiments at the Max Planck Institute of Ornithology in Germany and elsewhere have demonstrated how Greys are capable of showing kindness to each other: <u>https://www.sciencealert.com/african-grey-parrots-show-even-the-bird-brained-like-to-help-their-friends</u>

Brains of African Greys

African greys are highly intelligent birds that have a sense of reasoning and altruism and an ability to use the words they learn in the correct context. Researchers at the University of Alberta and the University of Lethbridge in Canada published findings in 2018 which showed that parrots have a brain part that primates do not have which provides a sort of 'super highway' between the cortex and the cerebellum and which gives them a sense of self awareness and allows them to do complex tasks:

https://www.smithsonianmag.com/smart-news/unique-braincircuitry-might-explain-why-parrots-are-so-smart-180969566/