

I

Meat

‘You’re fucked, mate . . .’

Eddie Jones may be a brilliant coach, but his bedside manner leaves a little to be desired. Even by the standards of the 6am texts he delivers while running on the treadmill, which make the recipient’s balls tighten and the brain melt, this phone call was brutal.

I’d spent four years as his captain, confidant, pupil and ambassador. I’d accumulated ninety-seven caps over ten years, coped with controversy and survived the ebbs and flows of international rugby. I’d lived the slogan ‘Leaders never show weakness’ but had struggled with a knee injury for eight months. He was effectively ending my England career with three words.

Eddie is always prepared, whether he is throwing the media a bone with a smart soundbite or confirming he has written you out of his provisional World Cup squad. I was at a disadvantage, because when he delivers bad news in person you can at least read his eyes. They are sharp and penetrating, and give a tantalizing hint of his inner thoughts.

The England environment was never relaxed, by design. To quote one of Eddie’s favourite phrases, borrowed from P. T. Barnum, the nineteenth-century American showman and entertainer: ‘Comfort is the enemy of progress.’ It’s difficult to assess his mood when he is a disembodied

voice, so our subsequent conversation was fractured and pretty surreal.

‘I’m not fucked.’

‘You can’t run, mate.’

‘I can. I ran this morning.’

‘You ran ten sets of fifty metres. That’s not fucking running.’

‘There’s a bit of swelling on the knee, but I’m powering through, training every day.’

‘I can’t pick you. You’re not fit enough. Start making a decision on what you’re gonna do.’

I saw a chink of light. It felt as if he was trying to get me to withdraw, voluntarily. That was never going to happen. I wasn’t going to make it that easy for him. I knew him as a firm but fair man, and it was time to try to set my own agenda.

‘Before you make any decisions, why don’t you give me some parameters, a goal, a level that I need to run at, to be considered?’

A pause: ‘OK, mate. I’ll get back to you.’

Twelve days remained until the provisional training squad for the 2019 World Cup was due to be announced, on 20 June, when one of his strength and conditioning staff sent me the session that would decide my fate. It was a forty-minute beasting, repetitive shuttle runs and explosive movement, on and off the floor, with barely a minute’s rest. That’s manageable at peak fitness, immediately after pre-season and with a few games in the legs and lungs, but close to impossible at that stage of my rehabilitation.

Eamonn Hyland, the Northampton Saints S&C coach overseeing my recovery, studied the programme and cut to the chase: ‘Do they want you to pass this?’ He works methodically, in a world of protocols and professional

caution. I work instinctively, in a world of pragmatism and professional urgency.

Though I understood his concern, and shared his suspicion that I had not been given the leeway allowed to others, as they sought to reach peak condition, I had no choice. ‘Do you know what?’ I said. ‘Fuck it. I’m nearly out of time. Let’s just get some running done. I’m going to have to drive this. Fuck the warm-ups. Fuck all the drills and technique work. Let’s just see how we go.’

My knee swelled every day, despite my wearing compression leggings. I did an hour’s round trip each morning to do low-impact work in a swimming pool. I paid for a masseur to work on me at my house each evening. I took painkillers, backed up by CBD, the naturally derived cannabis oil that elite athletes, in sports as diverse as golf, football and swimming, use to regulate sleep, the immune system and chronic pain.

My diet was ridiculously harsh since I needed to reduce body fat to underline my determination to regain and retain my fitness, but my body ultimately dictated the limits of my commitment. Everything came to a head after three days, on a Friday morning when I got into Franklin’s Gardens especially early to do a running session before driving to Wales to attend the wedding of George North, my friend and clubmate.

The routine had become familiar. My knee blew up, and the pain kicked in. I silently repeated the sportsman’s mantra of no pain, no gain, and went for a final push. Suddenly, I was seized by what felt like a sustained electric shock. Not for the first time, I had pulled a back muscle. I caught it before I entered spasm, and Eamonn advised me to stop.

I couldn’t, wouldn’t. What’s that they say about the definition of insanity, doing the same thing over and over and expecting a different result? I was ready to take that particular

cliché to a different level. I merely reduced my speed, closed my mind to potential damage, and got the distance in. I paid the price on the way to Wales, when I had to stop and find a doctor to drain my knee.

So-called joint aspiration is not a process for the squeamish, and involves the insertion of a needle into the knee. The doctor drew 80 millilitres of fluid into the syringe, an unprecedented amount. To put that into context, it is popularly assumed that 5 millilitres is enough to switch muscles off. The pressure on the joint was eased, but the process was as much mental as physical.

I was on my own in the hotel that night, because my wife, Jo, a make-up specialist, was attending the bride. As I lay in bed, churning over the possibilities, I had a moment of clarity and release. I'd had enough of being governed by Eddie. I was a grown man, who wasn't ready to be a semi-detached guest at my mate's wedding.

I'd keep off my feet as much as possible, but would have a drink, and enjoy the celebrations. My knee was bloody sore, but from that moment on I vowed to take things at my own pace. I accepted that I wasn't going to be announced in the initial World Cup squad, and wasn't bothered about the fall-out, the public perception of failure.

I unloaded on the Rev. Jez Safford, Northampton's club chaplain, in a quiet corner at the wedding reception. Like many men of the cloth, he has a reassuring presence. It's never about him, it is always about you. 'What's going on in your life?' he asked. 'How are you? Are you OK?' We'd both had a few – I was on pints and he was on the wine – and the barriers were down.

We talked softly about the hardest thing of all, having almost to justify myself to strangers, who would ask 'How's

the knee?’ with good intentions, when it was the last thing I wanted to dwell on. I couldn’t tell them the truth: ‘Actually, mate, it fucking hurts.’ I was forced to be an actor, reciting a well-rehearsed line: ‘Just trying to get it right, thanks, and training hard.’

I craved a quiet place, and would drive without the radio on, churning things over in my mind. Do I go up to someone in the street and ask them something personal? Do I ask about their health or their worries? Of course not; visibility is part and parcel of being a professional athlete. As soon as I came to terms with that, with Jez’s help, a weight was lifted.

I gave thanks for my blessings. I needed to get my knee right, not for rugby, but so that I could play on the trampoline with my daughter Thea, or go on a fun-run around the park. I needed to get fit enough for bike rides with my girls, and to be able to bend down to play on the floor with Thea’s toys. The transition to an alternative lifestyle, which began in the summer of 2018, when I faced the terrifying uncertainties of concussion, was fully underway.

There was no room for bitterness or self-recrimination, no point in sacrificing everything to please a bloke who, understandably enough, was no longer willing to give me a bit of wriggle room. I accepted the situation, because it made sense. High-performance environments have a high membership fee. Eddie has his way of working, which involves the imposition of pressure on those around him. It works for him.

I’d occasionally noticed the nervous tremor in the analyst’s hands, hovering over the computer keyboard during team video presentations. I’d come across England coaches, surreptitiously FaceTiming their families from a nook or cranny in the hotel because they didn’t want to give Eddie

the impression they were anything less than 100 per cent devoted to the cause.

I was no different. I had to earn my place in the team every single day. I wasn't picked because I was the best player. As one of the oldest members of the team, I had to set the best example in training. As a figure of supposed authority, I had to be a reassuring presence in front of the media. I was the embodiment of Eddie's belief in attending to the smallest details, in order to reach the biggest goal, of becoming the best in the world.

My credit came from working harder, and longer, than anyone. Did I enjoy that? Of course not. It can be miserable, doing additional training, attending seemingly endless strategic meetings with management and support staff when everyone else is on their PlayStation, playing cards, drinking coffee and shooting the shit.

Did I like being different? No. But I'm thankful I did it all, because it enabled me to experience the highs of winning consistently, and the satisfaction of leading from the front. Trust me, a Grand Slam or a Six Nations title stirs the blood, engages the brain, and batters the body. No commemorative DVD, or signed and framed match-worn shirt, can re-create that primeval sense of exhilaration.

The flipside is the feeling of redundancy when I couldn't set the example Eddie demanded. I was no longer much use to him. That was a blow to the ego, but I rationalized the reasons. Without wishing to sound like some sort of New Age philosopher, I was at peace with myself, and the world around me. The phone call to Eddie, confirming the reality of my situation, was one of the easiest I've ever made.

I didn't dwell on the swelling in the knee joint, or the severity of my back problems, because I didn't want to sound

weak. I stressed I was as lean as I had ever been. In terms of strength, and muscular definition, I was right where I needed to be. I simply fronted up that, as far as running was concerned, I couldn't push on as quickly as he required.

'Look, mate,' I told him. 'I'm just going to take it slow. I need to get my knee right for my future. I pushed too hard and hurt myself. I understand you need to crack on and prepare but just know that I'll be here and I'll be working. When I'm right I'll let you know. If you need good people, if you need a good person around you, I'll be there.'

Compassion and coaching are not mutually exclusive, but they don't coexist comfortably. Players are equally pre-programmed to look after number one. Eddie had other options to assess. I was no longer a hostage to his fortunes, but couldn't get away from the institutionalized brutality of my sport. Better players and bigger men had been down the same pathway.

I looked to a legend like Paul O'Connell, an amazing warrior for Munster, Ireland and the Lions. He had several years' grace at the start of his career, and spent the next decade balancing persistent injury with the responsibility of captaincy. When he spoke about the necessity of isolating stress, and reminding yourself why you play the game, he struck a chord.

Rugby is great for the soul, but terrible for the body. The intensity of the international game is intoxicating, but the hangovers are vicious, metaphorically and occasionally literally. My early years were disrupted by disciplinary issues, and the later stages of my career were interrupted by injury. That's not a happy medium to strike.

I eventually became sick of living on painkillers, of having my life controlled by aspirations to play for England.

Don't get me wrong – I cherished each and every cap – but self-imposed disciplines became wearing, because they eventually bordered on the illogical. They were all I thought about, first thing in the morning and last thing at night.

The moment I opened my eyes, I instinctively gauged how I was feeling. I worried about what I would eat for breakfast. Forget a fry-up – I denied myself a slice of toast, because I knew it would have a knock-on effect. Aware that the horror of my indulgence would be revealed in the weekly skinfold test, I became fixated, to the point of showing symptoms of OCD.

That's probably the way I am wired, and at least part of the reason I survived, at the coalface of the international game, for a decade. The mental pressure I applied on myself, due to the overwhelming importance I placed on maintaining my England place, became self-perpetuating, since it provided a perverse sense of comfort.

Eddie was a constant presence in my life. Like the rest of the squad, I had developed a strange, half-hidden dependency on him, because of the absolute power he wielded. Let's call it Twickenham Syndrome: in dealing with a head coach, players tend to develop a psychological alliance with their captor.

It wasn't unpleasant, since I was at ease with the daily deluge of his texts, and equally content when he periodically left me alone. I treated that respite as a sign of trust and respect; he knew me well enough to realize that I didn't need him standing over me, checking on my progress, to put in the hard yards.

An athlete craves certainty. I knew I needed to purge myself, by training every day. I knew what and when to eat. I knew my way around the gym. I knew what weight to lift,

what distances to cover on the ergometer, stationary bike or vertical skier. I didn't know, until it was too late, the limits of his tolerance.

Looking back, I was probably not as politically cute as I could have been during the key phase of my rehabilitation. Eddie monitors England players by proxy. Outside training camps and competition windows, his support staff, principally conditioners, physios and nutritionists, have the remit of visiting us, on our home turf, once a week.

They report their findings to the man dubbed 'The Master' by Jonny May, the speed freak winger named as England's Player of the Year after scoring six tries in the 2019 Six Nations. I had isolated myself from their sphere of influence by doing things my own way, and trusting familiar figures from the Saints support team, like Eamonn.

That denied Eddie his eyes and ears. I probably needed to be more inclusive, less independently minded. Without updates from his men in the all-too-brief off-season, he probably assumed I was on a beach somewhere, like my peers. In fact, I denied myself a family holiday. I shared the bleak rituals of rehab alongside Mike Haywood and Harry Mallinder, teammates who were also recovering from long-term knee injuries.

Mike was twenty-seven, and is an outstanding hooker in the Premiership. Harry was twenty-three, and will play for England. I was thirty-three, hoping against hope that my future wasn't behind me. People who wished me well in the street told me I was still a young man. I didn't feel like one, limping and wincing whenever I stood up with extreme care, just in case my back went again.

I yearned for normality. My body told me it needed rest. I knew my role, and retained the instincts of a competitor. At

close quarters I could still chew people up and spit them out, but there were other aspects of the game that scared the shit out of me. I was on the physio table when I blurted out the darkest thought: 'If my knee doesn't get better and I can't play, what are my options?'

There was no easy answer. I looked at the legalities of clauses in contracts covering career-ending injury. I'd paid into an insurance scheme for the entirety of my career, only to be advised that the policy could be contested, because of an operation I'd had on the knee eight years earlier. That's demoralizing when you are about to put your daughter into private school and you have no idea what your future income will be.

Players don't dwell on such realities when they are fit. The game seduces them, with its adrenaline rush. They are caught up in the daily dramas, consumed by the challenges. I'd hope that any player reading this would pause for thought. I'm one of the lucky ones, because I was shrewd enough to find the right people to help me with financial matters, but there are others at panic stations when they finish.

To all intents and purposes, I felt I was finished as an England player when I accepted an invitation to watch Wimbledon from the Royal Box on our first wedding anniversary, Saturday, 6 July, the day after England's official World Cup training squad had been confirmed. Usually I am on my best behaviour on such occasions, when there are games to play and appearances to maintain, but I thought 'Fuck it. I'm not going to the World Cup. We've got a driver. Let's rip into it.'

Traffic problems meant that lunch – lobster and strawberries and cream, washed down with champagne – was underway when Jo and I walked into the dining room. To my horror, the first person I saw was Eddie. Formalities dictated

that we had to be seated immediately, but out of respect I first approached him and his wife, Hiroko, with the promise that we'd link up later.

It's a real privilege being in such a situation, but an athlete's animal cunning kicked in. I wasn't about to change my plans for the day, so had a quiet word with a couple of the waiters, and asked that they serve up strong gin and tonics in water glasses. They kept them coming, so by the time we went out to watch the tennis, I was on the way to being pleasantly pissed.

The Royal Box was a sports fan's fantasy scrapbook that day. It contains only seventy-four seats, but with my obvious exception they all were filled by legends. Joe Root, Eoin Morgan, Andrew Strauss, Jimmy Anderson and Stuart Broad represented the England cricket team. Europe's successful Ryder Cup team were alongside the track and field icons Mo Farah and Sebastian Coe. Eddie had Gareth Southgate for company.

He was just down the row from where Jo and I were seated, between the Wales captain Alun Wyn Jones and Maro Itoje. Sure enough, while we were watching Rafa Nadal complete a straight-sets win over Jo-Wilfried Tsonga, my mobile vibrated with the text message: 'Meeting. 3.45 on the balcony.' I slipped out a couple of minutes beforehand, threw down a bombproof cup of coffee, and hoped I'd make sense.

There was a different dynamic to our 45-minute conversation. Eddie obviously enquired about my knee, and I asked for his perception of the biggest challenges facing his team. He spoke about the importance of unity, the difficulties of team bonding, and the need to develop a support structure around his captain, Owen Farrell. I gave him my perspective on the human chemistry of the squad.

I got the impression he appreciated my honesty, which was laced with Dutch courage. Our respect was unspoken, but felt mutual. I was conscious about not promoting myself, falling into the trap of telling him everything I could do for him. We both knew he could have used me in any role he wished. He was the boss. There was no point in false bravado.

I told him: 'I'm not going to waste your time. I'm not going to bullshit you. I'm not going to come in and not be right. I'll text you when I'm ready. If that's a week into the World Cup it'll probably be too late but at least you'll know.' Eddie's reply had an air of inscrutability: 'You need to go and see a guy called Bill Knowles. If you need any help with that, let me know.'

It turned out Bill was a world-renowned American knee specialist, who had worked one on one with the likes of Tiger Woods and Andy Murray. As soon as Eddie returned to Centre Court, to watch Roger Federer, I was on the phone to Phil Pask, a brilliant physio and unbelievable guy who has worked with the Lions and England for approaching thirty years.

He gave me Bill's number, and within minutes, oblivious to the hum of the All England Club spread beneath me, I was explaining my circumstances to him. He called back, as promised, the next day, a Sunday. He would work with me for a fortnight, from the following Friday. Jo, Thea and I flew to Philadelphia on the Tuesday, and stayed close to his Reconditioning and Athletic Development facility in Wayne, to the north of the city.

It's the sort of antiseptic, anonymous suburb that hints at the vastness of the US. It's a cultural cliché: houses are huge and lawns are manicured. You can't walk anywhere. Jo took

Thea to the local playground: it was immaculate, with no litter or dog droppings in sight, but deserted. Where were the kids? To be honest, that wasn't my problem. Hope had come flooding back; my priority was to keep it in check.

I sent a cryptic text to Mike, my collaborator on this book, as we settled in: 'The winds were blowing warmer than I thought,' I typed. 'The story could take another turn, or I could still be fucked.' I'd talked things through with Jo, and come to the conclusion that, although we were blowing our holiday money, it was a win-win situation.

I had to give it a crack, beyond the fact that untimely injury to one of Eddie's three hookers could give me a way back into his squad. I was seeing the best specialist in the world, so it was time well invested, irrespective of whether I got back to playing professional rugby. This was a smart down payment on the family future. I was there on Eddie's recommendation, which showed willing from my point of view. It changed my environment, gave me a fresh stimulus and a different outlook.

Bill's fees for the fortnight were \$15,000. Eddie came through for me when I sought support from Phil Riley, the England team doctor. He quietly ensured the RFU provided £10,000 towards my costs; Bill waived the outstanding balance because 'I don't need to make an extra couple of grand out of you.'

I quickly learned that such generosity summed up the spirit of the man. He was a hard taskmaster but a lovely guy, who saw the humanity in high performance. He seemed permanently amused by a previous client, the footballer Mario Balotelli, who had turned up in a previous facility, in Vermont, with only a small backpack, containing his mobile, a charger and a washbag. Bill kitted Balotelli out

in a local sports shop and took him for lunch in his favourite Italian deli.

In technical terms, Bill explains his philosophy like this: 'The best "brace" for any injury is neuromuscular control and coordinated movement patterns. These can be developed early and often if encouraged to do so. Unfortunately I find many rehabilitation protocols are more centred on what an athlete can't do versus what an athlete can do. This is often designed to protect the healing tissue, but I find the limitations imparted compromise the short- and long-term movement qualities of the athlete.'

In layman's terms, he basically told me my knee was fucked. I needed to have an internal conversation between my ankle and my arse. My knee was no more than a hinge; it would be helped by strengthening my backside and quads, and by developing a greater range of movement in my ankle. My recovery would be dictated by the principle of what he called purposeful walking.

It instantly changed how I thought about my injury. He explained I was limping, because my natural instinct was to offload the pressure on the knee, to reduce the discomfort. I had to embrace the pain by pushing down through the floor as I walked. It hurt like hell, but signalled that I was firing the requisite muscles.

Obviously, when you walk stiffly, with a peg leg, because it hurts, your knee doesn't bend as it should. Bill had me lapping his open-plan gymnasium on a gymnastic sprung floor. I pushed through my mid-foot, with the heel slightly raised, so I had to flex the knee. I was making a conscious movement, whereas in the previous ten years, when the knee was deteriorating, I was unconsciously trying to protect myself.

I'd developed what he described as a flat tyre run, and lacked the necessary cadence. Bill mimicked the sound of a puncture – 'babum, babum, babum' – and ordered me to 'attack the ground'. I'll never look like a sprinter, but as soon as I pushed through the floor, with a stiff ankle, my running gait became normal.

I've got a natural aversion to the yeesh-ha, high-five, American form of motivation, but it worked. Bill is in his fifties, but fiercely competitive. We worked on what he termed athletic puzzles, playing handball on a trampoline and badminton on the sprung floor. He succeeded in getting me to move naturally, without thinking.

He took me back to my childhood, to relearn what he called micro-skills, like a forward roll, or mounting and dismounting a pommel horse. My body needed to be re-educated to come to terms with the knee twisting in such sequences. He had me free running, jumping over obstacles without worrying about the consequences. Gym rats might giggle at footage of me swinging a large hula-hoop on the end of a broomstick, but it did the job.

An injured athlete devours case studies. Bill delved into his background in skiing, to tell of an Olympic downhiller whose knee range increased by 10–15 per cent when he put her on a playground swing and she repeated the natural movement of pushing and pulling the legs to gather momentum. His feedback, constant, demanding and stimulating, was invaluable.

Rehab is a state of mind, and mine changed. Without discrediting or disrespecting the physios who have treated my knee with massage and constant draining of fluid, I found I didn't need traditional treatment. I just needed to train. The process is ultimately self-driven, but having someone pushing

you individually through five hours of intense activity each day liberates the mind as much as the body.

Since coming back from the States, I do the majority of my fitness work in a two-metre-deep pool, at eight o'clock each morning. Running in water provides natural compression and enables your joints to flex. Bill also turned me into a human kayak; he provided me with a floatation bodysuit and an oar, with which I power down the lanes.

His expertise, and professional positivity, highlighted the shortcomings of British sport, which is still in its infancy when it comes to a creative approach to injury. With more money coming into sport, we are entering the era of the guru, who may be expensive but is worth every penny. Bill, for instance, works exclusively with Carson Wentz, the NFL quarterback; his fees are loose change, since the face of the Philadelphia Eagles franchise signed a four-year contract extension worth \$144m.

I know of rugby players who are looking outside the sport, to train with sprint coaches. Word of mouth means certain physios are working on a freelance basis with individuals, independently from the club structure. A new type of adviser is driving career progression; ultimately it doesn't matter if they are not offering anything particularly different, because the placebo effect is beneficial.

It makes me wonder how much better I could have become had I met someone like Bill when I was twenty-five. I would have been at my peak, physically, and been ready to reach another level, mentally. As it was, his report, sent to Eddie and the RFU via Phil Pask, described me as a VA, veteran athlete, and a JCA, joint-compromised athlete.

I love America. Over here you just get called an old git.

Bill recommended that I be assigned to an alternative training programme, based on low-impact aerobic work, and aligned to technical drills. I didn't need the percussive nature of the daily grind on the training paddock. If required for a Saturday Test match, I needed only to participate in squad sessions on Tuesday and Friday.

It wasn't me telling Eddie I had to work smarter, rather than harder, but his silence was deafening.

He confirmed I wasn't in the final World Cup squad in a ten-second phone call on the morning of the announcement, 12 August. 'How are you getting on?' he asked. 'Keep working.' I'm a big boy, and realize you are quickly forgotten in this game, but at that moment I felt like a piece of meat, thrown in the bin because it was past its sell-by date.

I would have gone to Japan as kit man, if asked. I felt as if I'd been used, but I'll still have Eddie's back if anyone questions his credentials as a coach. It's my own fault that I missed out on World Cups in 2007 and 2015 because of disciplinary issues and unfair perceptions of unreliability. I regret, bitterly, that I didn't treat the 2011 World Cup with the seriousness it deserved.

An injury, the result of a tackle, and exacerbated on an artificial pitch the following week, wasn't the way I wanted to go out, but the international game waits for no one. It hurts when I hear people refer to me as an ex-England captain, but I can still go back to my roots in New Zealand if I need emotional rescue. Translated from Maori, *Kia kaha* means 'Stay strong'.

I have and I will.

2

Mana

Who are we? Where do we come from? What qualities or faults pass down the generations? Why are we intrigued and inspired by people who exist in old photographs and fragments of memory? Apologies for the Meaning of Life stuff, but even a knockabout rugby player searches for answers to a deceptively complex set of questions.

We're all mongrels, really. My family is no different, though it is scarred by history and shaped by the quiet heroism that flourished in two world wars. I'm hugely proud of my heritage, which features the terror of Nazi Germany, the tolerance of New Zealand and England's tradition of offering refuge to waifs and strays.

The Schwarzschild family first settled in Frankfurt in the sixteenth century. Some 300 years later it was headed up by Moses, a wealthy Jewish businessman who, together with his wife, Henrietta, brought up his children to be open-minded, libertarian thinkers. My great-grandfather Alfred, born in 1874, was the second of their six sons, one of whom died in infancy. He grew up to be a noted artist.

His elder brother, Karl, became a globally renowned physicist and astronomer, who helped Albert Einstein define his theory of relativity while serving as a lieutenant in the German artillery on the Russian front, just before his death from a rare skin disease called pemphigus, in May 1916. They

even managed to exchange scholarly letters as the carnage unfolded around him.

Karl wrote: 'As you see, the war treated me kindly enough, in spite of the heavy gunfire, to allow me to get away from it all and take this walk in the land of your ideas.' Einstein replied: 'I have read your paper with the utmost interest. I had not expected that one could formulate the exact solution of the problem in such a simple way. I liked very much your mathematical treatment of the subject.'

That is now known in scientific circles as the Schwarzschild Metric. A childhood prodigy who had written two papers on celestial mechanics before his sixteenth birthday, Karl also made pioneering studies of black holes, electromagnetic fields, the physics of photography and Halley's Comet. An asteroid and a crater on the dark side of the Moon are named after him.

Alfred's art was based upon his study of anatomy. His portraits were scientifically precise, beautifully observed and hugely popular, until the Nazis prevented the sale of his work due to his Jewish heritage. Ironically, he had been awarded the Iron Cross in the First World War, when, as an observer in the German Flying Corps, he held a heavy camera over the side of the aircraft to photograph battlefield terrain before sketching enemy positions.

He married Theodora Lutner in 1924 and had three daughters, Luise, Bettina and Theodora, my grandmother. He twice fled to England from Munich to avoid persecution, in 1936 and 1937. His bank account was seized and stripped before his wife hid their remaining possessions, which were never recovered. She escaped to London in 1938 with her children on a series of dangerous rail journeys. Other Jewish families were forcibly removed from the train in Aachen, and never seen again.

My maternal great-great-grandfather, Herman Lutner, was transported to Dachau and executed in 1941 as a political prisoner. He was a Catholic, not a Jew, but loathed the Nazis and said so very publicly. Alfred fled after being openly defiant towards Hitler, who marched through the hotel where he was having a drink with a friend. His companion, like everyone else, rose, saluted and fawned over the dictator. Alfred sat still, arms folded, and refused to recognize his presence.

Alfred's most treasured possession was a silver tin in which he kept drawing materials. He was briefly interned on the Isle of Man, where he was wrongly accused of spying by an over-zealous policeman who discovered him sketching in the sand dunes. His asthma worsened in the smog of post-war London, and he died of a heart-related problem in 1948.

A small number of his paintings survive, and are hung in galleries in Europe and the Middle East. Others exist only in faded photographs. Postcard-sized sketches and doodles have also been collated, and give a greater indication of family life. They capture my grandmother as a baby, as a young girl singing with her mother beside a piano, and as a teenager tending an allotment while an evacuee in wartime England.

Like most people I'm fascinated by my forebears. So, however far-fetched it seems, it's natural to seek clues to my character from the family tree. I'm no one's idea of a genius, but when I look back I detect the virtues of a successful sportsman, even if circumstances are completely different. My ancestors were disciplined, clear thinkers. They took courageous decisions under immense stress. They were unafraid to be themselves.

My parents developed my work ethic, sense of adventure and loyalty to those around me. My mum, Caroline, was the

daughter of Theodora Schwarzschild and Robin Straker, who emigrated to New Zealand when she was ten. They relished the simplicity of rural life, the tightness of small communities and the possibilities of a young country, on the other side of the world. Hard work was a given; the land bred a certain sense of perspective.

My dad, Guy Hartley, is a wiry so-and-so, who would be described in England as a carpenter. The Kiwi version of the job is a bit broader; he can build houses from the foundations up, pouring concrete, lugging bricks and fashioning timber roof joints. I've always carried a photo of him in my wallet; he's my hero, an amazing man. He's been my motivation: all I've ever wanted to do is make him proud.

His parents, originally from Wellington, bought some land in a settlement named Hamurana, near Lake Rotorua, when he was sixteen. They rented Dad a small cottage, attached to a woolshed, when he married Mum, and sold them a two-acre block of the farm when they started a family. Money was tight but my brothers, Blair and Alex, and I played barefoot on gravel roads, without a care.

The lake was 200 metres from our front gate. It was fed by the deepest freshwater spring on the North Island. The water was unbelievably clear; we kayaked and fished with childish clumsiness for brown and rainbow trout, which swam in and out of the reed beds. In summer we would walk a mile to buy ice lollies at the local shop.

Our province, Bay of Plenty, was aptly named by Captain James Cook in 1769. You don't need money to enjoy the redwood forests, thermal pools, beaches and mountains. Whenever I go back to Hamurana, I'm reminded of the Maori concept of *Tūrangawaewae*, which is literally translated as 'a place to stand'.

I don't care if this sounds naïve, or over-sentimental, but it is a place to which I feel powerfully connected. I joke with my Maori mates that it's my place in the world. It has a distinctive smell of home. I feel emotional, like a soldier returning from combat. I revisit the streams we used to mess about in, and the paddocks where I used to practise my throwing and kicking with a Gilbert rugby ball Dad bought during the 1995 World Cup.

He didn't go shopping very often, but when he did he went big. We never got PlayStations; we were given practical presents, like a hiking kit, goggles, snorkels or flippers. On that particular trip, he bought Blair a basketball, Alex a football and me a pale-blue and green rugby ball, produced for the tournament. It started an obsession.

It went everywhere with me. I'd practise passing with my mates as we waited for the bus, and fantasize about being Jonah Lomu in the playground. When I heard that Rob Powley, the art teacher who coached the middle school's rugby team, was going to be at a barbeque, I'd rampage around the adjoining paddock, convinced he would be impressed by my ball-handling skills.

I kicked that ball until it went smooth and used a mini-rugby ball in pickup games of touch rugby before my grandparents bought me a black and white All Blacks ball for my birthday. On the rare occasions that ball didn't travel with me to school, we would roll up a hoodie in knots to play during morning break.

It's strange, but I don't get the same sense of self in my parents' new 200-acre farm. That's not to say it doesn't provide a release. I spent too much of my time in three-piece suits as England captain; when I go back to see my mum and dad I live in a bush shirt, rugby shorts and gumboots.

We stay in a little cabin, feed the livestock and drive around in a windowless Land Rover. It's just good fun: Thea and Jo love it.

The culture is changing a little, but our generation had a natural affinity with the land. We had tasks to fulfil, and I would often help Dad on the smallholding. I still visualize him in his flannel shirt, dusty from the sawmill at which he worked. He still calls me a 'mucker'. As he explained to me: 'When you've got a kid tagging along what does he do? He picks shit up and mucks in, doesn't he?'

Graham Henry and Richie McCaw have both made the point that the responsibilities and jobs kids have in rural New Zealand form the bedrock of All Black culture. Talent is only one part of the equation; the best players develop a natural grit, a homespun sort of humility, and instinctively never get ahead of themselves. They understand who they are playing for, and why.

The country is raw, but authentic. Kiwis are not materialistic. They don't want a flash SUV, a Chelsea tractor. They prefer a truck because you can put the kids in the back, along with the fishing kit and everything else that assists an outdoor lifestyle. Some of my earliest memories involve climbing in the back of my grandad's battered Land Rover and feeding silage to the cattle.

We did all sorts of good stuff, which would horrify modern health and safety jobsworths. The teachers didn't need to fill in a risk assessment form for our school outings; we hiked for hours and slept under the stars, or in rudimentary log cabins. It might have been politically incorrect, but it was wonderfully innocent.

Dad, and some of the other parents, used to help out. He specialized in setting up zip-wires into local creeks. Standing

in the water in a black singlet and shorts, to help us land safely, he had an instinct for the kids who were afraid of getting wet. All it took was a quick downward pull on the wire and they were given a good dunking. Everyone laughed and no one, least of all the victim, was offended.

He's sixty-two now, and suggests he is 'ageing like the finest Cheddar'. He played rugby until he concentrated on his college studies from the age of eighteen, and renewed his interest when he got married. He was a flanker, attracted to the social side of a game that acted as a release for local farmers and sheep station workers. There wasn't a lot left in the kitty after he'd paid for his petrol and a post-match bottle of beer.

He was there for me when I needed him, but he's not the type of parent to live vicariously through the sporting success of his kids. He hates the modern culture of fathers debriefing their sons after games: 'It doesn't matter whether it is positive or negative. It's happened. It's history. There's no bloody point talking about any of it.'

He has a sixth sense about whether or not I'm happy with my performance, which he tends to keep to himself. His critique of my schoolboy efforts was never personal; he offered judgement on the overall standard of the match. Basically, that meant either 'good game' or 'shit game'. Even today, he has to be a bit pissed to talk rugby.

He supports the All Blacks, though he at least admits to split loyalties when I play against them. He tends to take things in his stride. When I was made England captain against South Africa in 2012, he was approached for comment by a breathless reporter from the *Rotorua Review*. 'That's the first I've heard about it,' he told him. 'I've just got in from work. I'm not into this computer shit, and I don't have