

Prologue

'Well, you can't practice penalties, can you.'

I do not know how many times I have heard these words since *De Strafschop* (The Penalty) was published in 2000 and achieved cult status in the Netherlands. At that time, I was a football maverick with a keen interest in football tactics and statistics. Although not translated, the book also struck a chord in England. This wasn't much of a surprise to me. When I visited England in the 1990s and gave lectures near Birmingham and Leamington Spa, I only had to mention the shootouts against Germany (1990 and 1996) to bring tears to the eyes of even the toughest and roughest English fans. The number of English footballers missing an important penalty in a shootout has become a seemingly endless affair. Chris Waddle, Paul Ince, David Batty, Jamie Carrager, Frank Lampard, Marcus Rashford, Jadon Sancho, Bukayo Saka, Gareth Southgate, Darius Vassell, David Beckham, Ashley Cole, Ashley Young. Am I missing one or two? Fortunately, the English now have *The Three Lionesses*, the women's team that seems to take the penalty seriously!

So, during virtually every World Cup or European Championship for which *The Three Lions* qualified and reached the knockout stages, my phone rang, and a polite English journalist asked me if I could comment on the enigma of the penalty. Now, many years after the first edition appeared, I decided that an English-language,

completely rewritten version of my book *De Strafschop* would be welcome and appropriate. It contains a new approach that answers questions I received from journalists, students, participants and attendees during courses and lectures in the more than twenty years since the publication of my first football book.

Reference point: Panenka

I have been addicted to the penalty ever since AFC-Ajax player Dick Helling missed the decisive penalty against Levski Spartak Sofia in 1975. He had entered the field in the 112th minute as ‘the penalty kick expert’ but failed and missed by shooting towards the stars. A fact that unfortunately haunted him for the rest of his (professional football) life. His miss meant the definitive end to the first series of glorious years of the great club from Amsterdam. A year later, Antonin Panenka’s brilliant and still influential penalty in the 1976 European Championship final between Czechoslovakia and West Germany warmed the hearts of millions. It also taught the Germans a hard lesson. If you miss important penalties, you don’t win trophies.

I had seen both penalties live on television and was impressed by Panenka’s calmness and technique and amazed by the naivete of Ajax and Helling. Shortly afterwards my own football career ended due to a chronic knee injury. The only thing I could do was to take penalties against a garage door near my parental home. A few years later, around 1980, I was sure that my injury would heal quickly. I had to make sure I was ready for the moment when I had to take the decisive penalty against *Die Mannschaft* at the 1986 or 1990 World Championships. I practiced penalty kicks with a tennis ball. The story at the time was that many Brazilian players, mostly

from the favelas, did not have enough money to buy a good ball. By practicing with a tennis ball, their technique became superior to that of the rest of the world. So why not learn from the best?

I was completely absorbed in my whole penalty idea, which lasted well into the 1990s. My favourite players became those who could take ‘perfect penalties’, such as Alan Shearer, Matt Le Tissier, Gary Lineker, Ronald Koeman, Johan Neeskens, Paul Breitner and Andreas Brehme.

Achilles’ heel

Long story short, my injury never healed, and my personal moment of glory never came. I would never take the last penalty and score for the Netherlands against Germany in the final of a major tournament. And why worry? The Netherlands has and had enough capable players to take nice penalties, right? Well, as all football fans around the world surely know, we don’t and neither do the English. Penalty is the Achilles heel of both countries, and our national and club teams have suffered many defeats since the 1970s. Sometimes in a painful way. Anyway, *‘You can’t practice penalties, can you.’*

By contrast, I often watched the *Bundesliga* and the German national team. I was surprised never to hear this same, infamous line on German television. Probably because the Germans seldom miss but maybe also because they take *Der Elfmeter* very seriously. Germans approach sports in general the same way they produce cars, improving processes year by year by a few percent. In the end, they build great cars. They approach penalties by doing extensive research, always trying to find ways to improve and learn from their mistakes. I read many (published as early as 1979) German

documents on taking penalties. So, in the end, in football, Germans win championships by kicking great penalties.

After *Die Mannschaft's* defeat against Czechoslovakia at the 1976 European Championship, virtually no German player has missed a penalty during an important international tournament. Uli Hoeneß may have missed in 1976, but he has paved the way for impeccable scoring ever since. In the decades since their shootout defeat, only Uli Stieleke has missed a penalty in a World Cup shootout. It's not a valid statistic, but I wouldn't allow another *Uli* to take a penalty. It's also no surprise that naming your son *Uli* has become quite unpopular in Germany.

The German scoring ability is almost perfect and is in the range of 90-95%. That means they only miss one in fifteen to twenty penalties. Many statistics will be shown later in this publication. Compare this figure with those of the national teams of England and the Netherlands. Both teams miss approximately one in three penalties. This is a significant difference that cannot be explained by chance alone. There must be another reason, another explanation. This explanation is given in *Cracking the Penalty Code*.

Inquisitive minds

With an inquisitive mind I noticed this big difference in 'chance' between national teams and clubs in the period 1992 - 1998. The Netherlands lost shootouts in major tournaments against Denmark (1992), France (1996) and Brazil (1998). Ajax lost the 1996 Champions League final to Juventus after a shootout. England lost to Germany (1990 and 1996) and Argentina (1998) and won only once against Spain (1996). While the English and Dutch lost important shootouts in the decisive stages of

championships, the Germans often walked away with the trophies after taking penalties that came close to perfection. After another defeat for the Netherlands in a shootout against Brazil in the semifinals of the 1998 World Cup, I decided to publish a book on this subject. My main research question was: is there any point in practicing penalty kicks or not, and if so, how can Dutch players improve their penalty skills? I started analysing the statistics and used all the relevant data available at the time. *Moneyball* (about the successful use of data in American baseball) was released three years later. Until then, there were only a handful of curious minds (journalists, scientists) researching on the penalty.

No nonsense

De Strafschop was published shortly before the 2000 European Championships in Belgium and the Netherlands. To get it published, I had to start my own publishing company. No one was willing to publish my manuscript. Why not? *Because 'Well, you know, you can't practice penalties, right? Even Johan Cruyff says that.'*

Based on the analyses in my book, I argued that: a) success in a penalty shootout was not due to luck; b) the Dutch team would be kicked out of the European Championship in the knockout phase after a shootout because they do not practice penalty kicks; c) Contrary to what 99% of the Dutch population believes, Frank de Boer and Patrick Kluyvert should NOT take the penalties for the Dutch team. Their run-up reveals the direction the ball will go; d) Edwin van der Sar is a great goalkeeper, but a poor penalty killer; replace him with Sander Westerveld, a much better penalty killer; bring him onto the pitch for the last five minutes of the match to save the penalties.

I defended my case in the then most popular Dutch talk show, Barend & Van Dorp, just before the tournament started. Not much happened with the book during the first two weeks of the Euro 2000 tournament. I sold a few copies, but most people ignored the results of my research. Most of them said they liked the show on television, but when they talked about my book they said, *'You were just kidding, weren't you? Because 'Well, you know...?'*

The start of change

The European Championship 2000 became the starting point of my career as a 'penalty pundit'. In the first match of the tournament for Oranje, Frank de Boer scores a penalty for the Dutch team against the Czech Republic. Not well taken in my opinion, but no one cared. In the quarter-finals, the Netherlands beat Yugoslavia 6-1 and became the favourite of the tournament. A semifinal against the Italians would be the last hurdle to reaching the final. This match would create and trigger our national penalty trauma. The Netherlands outclassed the Italians and played *Total Football* for most of the match. The Netherlands suffered an embarrassing defeat after missing two penalties in normal time and three in the shootout. None of my suggestions or ideas were taken seriously by the technical staff led by manager Frank Rijkaard.

That evening and the next day I gave one interview after another about penalties and shootouts, a feat that has never stopped since 2000. Although the book was published in Dutch, thanks to David Winner's book *Brilliant Orange*, in which a chapter is devoted to my work, and Ben Lyttleton's *Twelve Yards*, the ideas also found fertile ground in England. Not really a surprise to me. According to English folklore, *'You can't practice penalty kicks, can you?'*

Hostile environment

When I wrote *De Strafschop*, I had no idea that my book would provoke such fierce and sometimes even aggressive reactions from coaches and (former) players. Almost everyone called the idea of practicing penalties and preparing for a shootout, and I say this elegantly now, nonsense. This was completely at odds with the goal I was trying to achieve, which was to increase the Dutch team's chances of winning a major tournament.

The topic of practicing penalties is as relevant as ever. When I started in 2000, 99% of the population believed practicing penalties was a waste of time. I have seen this sentiment change. Slowly but surely. I do not encounter a hostile environment anymore when speaking about practicing penalties. Big data, laptop trainers, technology, a younger generation has grown up with these ideas. It is my strong belief that English and Dutch fans have suffered long enough. It is time to break the chain of shootout-failures. This is possible. There are however still influential football analysts who claim penalties are untrainable.

Cracking the Penalty Code is more than just a publication with a lot of data. It is as much about changing a way of thinking as it is a personal account of my 25 years as a *penalty pundit*. My idea was to provide information to change and improve the results of the Dutch teams. The resistance I encountered was great. In daily life I work as an independent consultant, often for organizations with a strong culture. I see the strengths of these cultures, but also the weaknesses. Strong cultures are not very open to new ideas and innovation and often suffer from the *not-invented-here syndrome*. In plain English: 'Our organization didn't think of it first, so it can't be right.' Frankly, I think the football world is one of the

worst of its kind in this respect. This meant that I not only had to crack the penalty code, but also the football world. I had one strong argument for continuing this fight: the facts always spoke for themselves.

FC Einstein

However, this new book on practicing penalties is still a necessity.

'Because, you know, you....'

'No! Please stop here and now! You can!'

'Not really! That is not possible!'

'Oh yes, that's possible! You can practice penalty kicks and deal with stress better. That's a fact!'

When faced with all this resentment and resistance to the ability to prepare better for a shootout, I often think of a quote from Albert Einstein, one of the greatest geniuses of the twentieth century.

'Stupidity is doing the same thing over and over again but expecting different results.'

Not practicing the penalty and expecting to win a lot of shootouts doesn't just sound like madness. It is. This is much to the regret of most football fans, who would love to see their teams finally win a shootout. *Cracking the Penalty Code* aims to provide as much evidence and practical information as possible to make this possible.

Liberate yourself

I have chosen to publish *Cracking the Penalty Code* in English and focus on both the English and Dutch shootout traumas. There is a lot to learn for both countries. Football fans from all over the world love English football and really hope that football *comes home*. I have great expectations for the current English, talented team. I mean, you can vote for Brexit yourself, but who wants the England team out of a European tournament? I really hope that this publication will help the English (and Dutch) team cross the threshold from failure to success. It will be an honour to help the English for whom my father served as an interpreter in the British Army of the Rhine (BAOR) in 1945-1946 and whom he always saw as his 'liberators'. I hope that his son will now 'liberate' the British from their penalty syndrome. A small thing compared to his newfound freedom, but it would make him proud, I'm sure.

Big thank you

I am indebted to a lot of researchers, journalists, curious minds, players, coaches, and others who have come up with questions and answers surrounding the penalty which I used in this book. The researchers come from all kinds of backgrounds, and all had their own ideas, needs, and wishes when they started working on the penalty. I have used their work, sometimes very influential, sometimes only a footnote, to arrive at an integrated approach. Some work in behavioural and movement sciences, others are statisticians, psychologists, sports journalists, etcetera. Most of this research uses football as a case study. The focus of research lies elsewhere, such as dealing with stress or analysing specific movements of the body. *Cracking the Penalty Code* is completely

dedicated to the penalty to improve the conversion rate of players and winning a shootout.

I would like to thank authors and journalists Bernard Krikke, David Winner, Ben Lyttleton; behavioural and movement scientists Geir Jordet, John van der Kamp, Geert Savelsberg, Daniel Memmert, Benjamin Noël, Georg Froese, statisticians such as Opta (organization) and Ignacio Palacios-Huerta. I know I'm forgetting many others. Please look for their names and work in the list of publications at the end of this book. Thank you very much to all of you!

I would like to thank Mirjam for her enthusiasm, patience, and support in most, if not all, of my efforts. My family for supporting me, my friends for their bewilderment when I (again) come up with new ideas. A special thanks to my 'enemies', and to all the Dutch and English players who have missed a penalty over the past 25 years, for keeping the topic of improving penalty taking relevant for so long. I do hope however that the following words will soon be heard across England and by all the fans who support *The Three Lions and Lionesses* and/or *Oranje* at the upcoming European and World Championships.

We won a shootout; we finally know how to take penalties!

We won! Oh yes, we can!

George Vergouw

The Hague, the Netherlands