

The Legacy of Festina: Patterns of Drug Use in European Cycling Since 1998

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Since the Tour de France doping scandal of 1998 there has been a concerted effort to ‘clean up’ cycling. But has this meant a change in attitude regarding the use of doping within the professional cycling community? In order to compare norms and values of today’s elite cyclist with those of earlier periods, three historical phases in modern cycling are identified, and an account of professional cyclists’ preparations is given for each phase. Because of the different attitudes to doping found between riders of different categories, the article considers it necessary to reject the commonly held view that elite cyclists all take part in the same deviant subculture.

The 1998 Tour de France scandal made it clear to everyone that doping was being systematically used within the sport of cycling. [1] The investigations by the French police revealed that an entire cycling culture – riders, coaches, doctors and officials – had secretly lived with and practised doping as part of their particular lifestyle.

Since then, a major effort has been made to clean up the sport. Cycling’s governing bodies and a number of public institutions have been involved and have contributed to the intensified campaign against the use of drugs in the sport. A key event in this campaign was the establishment of the World Anti-Doping Agency (WADA) in 1999 and the signing of the

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Common Code in March 2003, a document which aims to develop a unified and systematic response to the use of doping in sport in general.

The 1998 Tour de France served as a powerful catalyst in the struggle against doping, and it is significant that cycling has produced many of the most recent prominent cases, as examples from the 2004 season as well as the beginning of the 2005 season show. Thus in January 2004 it was revealed that riders from the French team Cofidis had organized a major doping network. In February of that year the doctor working for the French Cycling Association, Armand Mègret, stated that at least 30 per cent of the French riders were still using EPO. In March, the sacked Spanish Kelme rider, Jesus Manzano, told his story to the press about the systematic use of doping by the Kelme team. In June, the reigning individual world time-trial champion, David Millar, was charged with the use of EPO. In August, the Phonak rider Oscar Camenzind was accused of taking the same substance. In September, his two team-mates Tyler Hamilton and Santiago Perez tested positive for blood doping. In October the Belgian rider Johan Museeuw, a specialist in the classic races, was banned for four years for using EPO and other performance-enhancing drugs. The 2005 season opened with serious accusations against the Italian Acqua & Sapone squad; the sprinter Danilo Hondo tested positive for a stimulant; in August seven - time Tour de France Winner Lance Armstrong was accused by French paper *L'Equipe* of having used EPO when he won in 1999, and in September four - time Vuelta a España winner Roberto Heras tested positive for EPO.

In the light of these events, it is not difficult to understand why cycling is perceived by many people as particularly affected by doping. This perception is not only due to the media's focus on the problem, but is also confirmed by WADA's statistics for 2003 which show cycling to be one of the Olympic sports [2] with the highest number of positive doping tests. Cycling was responsible for 3.93 per cent of the positive tests in 2003, which was more than in boxing (3.68 per cent), almost twice as many as in weightlifting (2.06 per cent), nearly three times as many as in athletics (1.46 per cent) and more than four times as many as in soccer (0.93 per cent). [3]

Along with the many prominent doping cases, these statistics raise a central question: have the attitudes towards, and the use of, performance-enhancing drugs among professional cyclists changed at all since 1998? This is the question I will seek to answer in this article. The choice of 1998 as a defining year is due to the fact that the 1998 doping scandal involving the French Festina team kick-started a renewed campaign against doping. My point of departure is the Danish version of this situation, and my

analysis is based on material from qualitative research interviews with thirty-four Danish riders, interviewed by myself and my colleague, Kristian Rasmussen, in 2002 and 2003. [4] Danish riders compete all over the European continent, are employed by multinational teams and often live in central and southern Europe. Hence their views and experiences are to a large extent formed by what they encounter at an international level. Which means that even though the Danish experiences are central to this article, they also serve to address issues affecting the broader European situation.

The focus of this essay is thus on contemporary history. However, in order to understand the current situation it is necessary to take a general look at training methods and drug use in cycling from 1950 until the present, since these practices are relevant to the situation in which riders find themselves today.

Preparation for races, 1950 to 2004

In the following description of the development of training methods and drug use, I will distinguish between three historical phases: the 'classical' period from 1950 to 1984, a period of change and reform from 1984 to 1989 and the post-reform contemporary period from 1990 to 2004. This is the division used by Benjamin Brewer in his recent article about the commercialization of cycling. [5]

The 'classical period': 1950–84

The training methods and riders' preparations for races were relatively unsophisticated during the classical period. There were few major breakthroughs in the development of training techniques that were explicitly based on scientific ideas during the years from 1950 to the mid-1970s. The general consensus was that riders should spend most of their winter and spring training on long endurance rides in order to build up a 'base' for competitions during the racing season.

However, there has always been a progressive attitude within cycling towards the medical and technological products made available by modernity. [6] And with the availability of amphetamine in the 1950s, riders gained access to a potent stimulant drug which became widely used within the sport during the 1960s. However, as is the case with performance-enhancing drugs today, this did not mean that all riders had equal access to stimulants. In the spring of 1967 the English former world champion Tom Simpson spent £800 on what he expected to be one

year's supply of amphetamines. This was a significant amount of money at the time, and a support rider earning between £4 and £16 a week would never have been able to sustain such an expensive habit. [7]

Professional cycling was among the first sports to introduce compulsory drug tests. A few years earlier, sporadic and imprecise tests had been carried out, but after the World Championships in 1966 the tests became more regular, precise and carried legal authority in terms of sanctions and exclusions. [8] Several prominent riders were strongly opposed to these tests. Among them was the five-times Tour de France winner Jacques Anquetil, who spoke out against the tests on several occasions. He argued that these tests constituted an infringement of the integrity of the riders, and he defended their right as adult, autonomous individuals to manage their own lives and health: 'We find these tests degrading' he said when the controls were introduced in 1966. 'Why should cyclists have to be suspected and controlled while any other free man can do what he likes and take what he likes?' [9]

After the ban on doping came into force in the late 1960s, the use of drugs was hidden from public scrutiny. But consumption was not significantly reduced. Riders, trainers and masseurs were behind the distribution of the drugs, and the dosages were determined according to other riders' experiences, through 'trial and error' and according to 'traditional advice'. In this way the use of drugs reflected the social organization of training and preparation which was common at the time: unsophisticated and bound by tradition. [10]

In certain respects amphetamines and other stimulants are easy to manage. They are taken on the day of the race; the effect on the nervous system is immediate (reduced fatigue and a feeling of enhanced strength and self-confidence) and wears off relatively quickly. Hence, the use of these drugs does not require close medical supervision. From the 1970s, however, the use of a different type of drug – anabolic steroids – became widespread within the sport, and initially they too were used in an unregulated way. [11] But unlike the stimulants, these drugs have a real and longer-lasting physiological effect, and it was therefore most productive to take them on a more regulated basis – during training periods – in order to enhance recovery and rebuild muscles. [12]

The reform period: 1984–89

In 1984 the Italian champion Francesco Moser set a new world record for the one-hour time trial. At the time the holder of the record was the Belgian Eddy Merckx, and Moser was the first rider ever to cover more

than 50 kilometres in an hour. Both Moser's specially built aerodynamic bicycle and the scientifically structured training regime he followed in preparation for the record attempt caused widespread astonishment within the sport. Watching a senior professional rider who had adopted new training methods attack the mythical world hour record on a bizarre-looking bicycle was a clear indication that the classical period was coming to an end. [13] Moser's training programme was based on the newly invented portable heart-rate monitor, and he worked in close cooperation with the physiologist Professor Francesco Conconi. [14] During the 1980s Conconi and his protégé Dr Michele Ferrari (and later also Dr Luigi Cecchini) became the most prominent doctors within cycling circles. They acquired a high status within the sport which they have maintained to this day, and it was primarily due to their work that riders made great progress during the 1980s. Training became more scientifically based, and the tradition-bound focus on marathon distances was replaced by interval training and more careful and precise periodization.

Changes in the use of drugs were still in a developmental phase and were not as important as the implementation of new training methods. The use of amphetamine was apparently still common, [15] but more significant changes occurred along with the development of steroid hormones. [16] In January 1985 it was revealed that the great success experienced by the American cycling team at the Olympics in Los Angeles six months earlier had involved extensive use of blood doping. [17] However, as Brewer points out, even though the blood doping scandal was controversial at the time, it proved to be a portent of the paradigmatic change in drug use which occurred about six years later, rather than a revolution in the use of doping within the sport in the mid-1980s. [18]

The contemporary period: 1989–2004

The season for professional riders has become longer. Normally they now have only two months without any racing, but even during these months they cover around 2,000 kilometres of basic training and attend training camps. Close scientific monitoring of the riders has become the norm, and in addition to the normal bicycle computer and heart-rate monitor, many riders today also train with the so-called SRM system (*Schoberer Rad Messtechnik* – Schoberer Bike Measurement Technique), which measures the effect of pedalling and stores these measurements in a computer. Thus, every step on the pedal can, in principle, be made the object of analysis and be adjusted for optimization. During the post-

reform period the scientifically supervised training that arrived in the wake of Moser's hour record became fully institutionalized.

Modern doping drugs represent a fundamentally different approach to performance enhancement. The most common doping drug of the 1990s in cycling has been EPO, a hormone found naturally in the body which stimulates the bone marrow to produce more oxygen-carrying red blood cells. In addition to this, anabolic steroids are still used primarily for faster recuperation (rather than the bulking up of muscles), and growth hormone has also become very popular for the same purpose. [19] Unlike steroids, growth hormone is still impossible to detect in a drug test. Steroids and growth hormone are often taken in preparation for important races in order to optimize training and to enable the rider to train even harder. With the technique used until 2005 EPO could only be detected in the urine for about two to three days (see below); hence this has also primarily been used during the riders' build-up phase rather than during races. The effectiveness of the so-called EPO urine test, introduced in 2000 has, however, led to a resurgence of blood doping within the sport. [20]

All these modern drugs and techniques require close medical supervision, calibration and monitoring, which is normally beyond the competence of the average rider. In this way they represent a radical change both in relation to their physiological effect on the athlete and in relation to the social organization of doping. As the sports sociologist Ivan Waddington has pointed out, however, the increased presence of medical expertise within the sport is not just a consequence of the need to monitor drug use. The experts have also played a major role in connection with the introduction of drugs into the sport:

[T]he growing involvement of practitioners of sports medicine in high-performance sport, especially from the 1950s, has increasingly involved them in the search for championship-winning or record-breaking performances, and this has led them in the direction not only of developing improved diet or mechanical and psychological techniques but, on occasions, it has also led them . . . to play an active part in the development and use of performance-enhancing drugs. [21]

This seems to be the case in cycling. The doctor employed by the Festina team in 1998 was a central figure associated with the distribution of drugs and with monitoring the doping programme of the team; in addition, doctors such as Conconi and Ferrari have, over the past few years, assisted with the systematic doping of riders. [22] In the case of these doctors, Waddington's claim is even more relevant: during the 1990s, Conconi's

research laboratory had been receiving funding from the International Olympic Committee and the International Cycling Union for the development of a reliable test to detect the use of EPO. At the same time, he had been coaching a number of top riders and managing their drug use. [23] Moreover, it is worth noting that the periodization and careful planning that is characteristic of the management of modern performance-enhancing drugs reflect the development of scientific training programmes, several of which were developed and refined by Conconi and Ferrari themselves during the 1980s and 1990s.

Periodization of training is one of the great steps forward in the development of practical training physiology over the past few decades. [24] This method has been made even more sophisticated through the use of accurate measuring equipment such as the SRM system mentioned earlier. But the increased volume of data generated by this sophisticated equipment also ensures the necessity of medical professionals for the management, analysis and revision of training programmes. The riders e-mail their training data to their trainers/doctors, with whom they are in contact on a weekly or, during their peak periods, daily basis. Developed by the practitioners of sports medicine themselves, the new sophisticated training principles hence contribute to consolidating the hegemonic position of these doctors in relation to training and preparation.

We have seen that the way in which riders prepare for their races has developed significantly during the last fifty years. Training and drug use have become much more complex, and the sport makes increasing use of medical and technological expertise. With the Tour de France doping scandal of 1998, the public became aware of the widespread, and not always legal, use of medicines within the sport. But the media and the public were not the only ones to find these revelations shocking. Within the sport the drug scandal came as a great shock, making it clear to riders and teams that, from that moment on, the sport had acquired a new set of rules.

Three scenarios for the use of doping

Since 1998 the official attitude has been that there must be no more scandals. [25] It has therefore been necessary to intensify the testing of riders to try to eliminate drugs from the sport. Looking only at the Tour de France, there have been no major cases in the seven years from 1998 to 2005. (Whether the case concerning Armstrong's 1999 urine samples can be considered a major case is debatable).

This might indicate that efforts in the campaign against doping have been successful. The first scenario for the new rules of the game might

therefore be that, as a consequence of the increased testing and enhanced testing methods, the majority of riders now race without the use of illegal performance-enhancing drugs. This corresponds with the statements from the majority of the Danish riders we interviewed, to which I will return later.

However, the fact that in 1999, 2003, 2004 and 2005 the riders achieved higher average speeds than ever before, along with the many doping cases outside the Tour de France, points toward alternative scenarios. An alternative view of the current rules of the game might thus be based on the revelations concerning the professional teams Phonak, Cofidis and Kelme. In the Kelme team (and to a lesser extent in the Cofidis and Phonak teams), the use of drugs has apparently been organized in the same way as it was in the Festina team during the 1990s. If we are to believe the sacked Kelme rider Jesus Manzano, the riders in the Spanish team have been more or less forced to take EPO and growth hormone, and they had to endure badly administered blood transfusions in connection with blood doping before the 2003 Tour de France. [26] In my interview material, however, there is nothing to suggest that such methods are used in the teams that employ Danish riders.

The third possible scenario for the new and implicit rules of cycling is a reduced role played by the teams in connection with drug use. Because of the significant risks associated with bad publicity, the teams no longer want to be involved in organized doping. Decisions about the use of drugs are therefore left to individual riders, who also have to organize their own doping regimes. But the organized use of drugs must be kept strictly separate from the joint activities of the team. 'You are not allowed to transport any medicine whatsoever when travelling with the team,' the rider Frederik explains:

We have a very clear set of rules. I am not allowed to transport anything. In my toilet bag I am only allowed to have normal painkillers and cream for my bum for when I have pressure sores and that's it. It says in my contract that I am not allowed to carry any medicine myself, and the team is allowed to search suitcases as a control measure.

The team doctors do not carry illegal medicines either, as he explains: 'Many of the teams enforce a very strict line. Nobody drives around any more in a car like the one Festina used to have. It just doesn't happen, because the team would be closed down and fifty people would lose their jobs.'

With no illegal drugs circulating inside the teams, they can publicly deny any knowledge of drug use and thereby protect themselves against financially damaging scandals. For those riders who choose to make use of

doping, it probably means that they encounter the drugs at a later point in their careers than would otherwise have been the case. This is due to the fact that access to the illegal drugs requires establishing a network which is not connected to the rider's team.

External doping networks

The analysis above suggests that drug use within contemporary cycling is primarily organized through networks outside the teams. If this is correct, the networks do not have the institutional character typical of the Festina team of the 1990s. To a certain extent, this differs from the picture presented by Waddington:

Perhaps the first point to be made is that this case study [the 1998 Tour de France] brings out in a particularly clear way the figuration of relationships among those involved in what might be called the doping network. It should be noted that, in some respects the situation in cycling may be rather special . . . and, as a consequence, it may also be the case that in cycling these networks are more organized and more systematized – in a word they are more highly institutionalized – than in most other sports. Nevertheless, when placed alongside other detailed and reliable case studies, such as those provided by the Dubin Commission of Canada's 1988 Olympic weightlifting and sprint teams, it is clear that at the elite level it is simply unrealistic to see the individual drug-using athlete as working alone, without the assistance and support of others. [27]

The implications of a 'drug bust' for a team's sponsorship suggest that the strongly institutionalized networks associated with the teams have been dissolved, the Kelme team perhaps being a curious exception. Instead, the riders need to establish their own doping networks external to the teams. Waddington is therefore right in saying that doping requires the cooperation of others. There is a need for contact with people who can help with storage and delivery, for example, but especially with expertise and relevant knowledge. Without people who know which drugs to take, when to take them, and how they work, access to drugs is useless. As one of the elite riders, Christian, emphasizes:

It is of no benefit to have lots of stuff thrown at you straight away. For example, I have spoken to riders who didn't know what to do. They might have all the drugs in the world in front of them, but they didn't know what to do with them.

The networks that can offer medical assistance are not in place when a rider begins his professional career. They have to be established gradually through friends and colleagues who help the rider gain contact with ‘the right people’. The doping networks external to the teams are largely built on trust, which requires time to establish. As one of the interviewees put it:

It depends to a large degree on confidence and friendships. You don’t just go to Bologna and ring Dr Ferrari’s door bell, who will then receive you with his arms open, and then you pay €5,000 and go home with a full suitcase. It doesn’t work like that at all, because it requires a confidence which takes many years to build up. It is – how can I explain it? – it is a gradual introduction to the professional environment.

Frederik is one of the Danish riders who, at a critical point in his career, gained access to such a doping network outside his team. He took the initiative due to problems caused by over-training, which almost resulted in anaemia – ‘and it’s certainly not healthy when your haematocrit count is thirty-six, and you are supposed to be doing sports. That puts you right at the other end of the scale,’ he says. [28] A close friend, who vouched for him, introduced him to people who would be able to help. At first they provided vitamins and minerals, but later he also gained access to more potent drugs. At the core of the network were only five or six people, including a masseur and a doctor, and a couple of other riders. This small group of people constituting the network did not find each other on the basis of previously existing professional relations but through friends and friends of friends. As Frederik gradually became a part of this community, he came to owe his loyalty to the others because they had trusted him. Presented with the hypothetical possibility that he might one day be caught in a test, he emphasizes that he would never reveal the activities of the others in such a situation. In general, riders are very careful and speak as little as possible about doping. Even though the activities within the network have led to what Frederik describes as warm and lasting friendships, he is also aware that these strong ties are strictly necessary, ‘because what is done is in reality a criminal offence’. For this very reason, they have to be certain that they can trust each other.

Even though such a network may look like a criminal mafia from the outside (and in some cases it is a criminal arrangement according to the doping laws of some countries), it is primarily seen by the riders as a necessary arrangement which enables them to pursue their ambitions. For them the criminal aspect of the network is a practical rather than an

ethical problem. As Frederik explains, though, these risks are taken for the sake of sporting success: 'What I think should be emphasized is that it isn't done for money. Because that's not possible. It's simply too tough for that. Nobody injects this or that drug into their body to make money. The driving force is ambition and passion.'

It is, however, understandable that the structure of a network such as Frederik's, with its demand for loyalty, internal obligations and help for 'friends of friends', feeds the image of a mafia-like brotherhood based on the law of silence, *omertà*. The problem with this image is that it does not just see the silence as a necessary precaution so that riders can use these small limited networks. It also suggests that the sport is one big conspiracy. The interviews with the Danish riders show that this perception is wrong.

Doping within Danish cycling

Apart from the will to enhance performance in an illegal manner, two basic conditions need to be fulfilled in order for an athlete to make use of doping. Firstly, there has to be a drug that works for the sport in question; and secondly, as has been shown previously, the athlete needs contacts and relations with people who can help him gain access to, and possibly counsel him in the use of, the drug. Even though EPO can enhance performance, this does not automatically mean that even those riders who would like to use it always do so. As noted previously, the modern potent hormone-based drugs require guidance and help from people with medical knowledge. It is not enough to simply distinguish between different sports in order to understand the pattern of drug use. One also has to look at how drugs are used within each sport. This is not only because athletes might have differing opinions on what is right and reasonable, but also because, depending on conditions such as age and performance level, they do not have the same opportunities to establish relationships with experts. It is necessary to distinguish between the most talented young riders, the riders belonging to the national elite, and the riders belonging to the international elite.

The young talents

There is no reason to believe that doping is currently a problem among talented young Danish cyclists. None of those interviewed had experience with illegal drugs or methods. The young riders generally expressed great

uncertainty and had little knowledge of what one might use and which drugs actually have a performance-enhancing effect. Of course, they have heard about EPO and, to a limited extent, they know how the drug works. But they remain largely ignorant of the three other potent drugs (amphetamine, anabolic steroids and growth hormone). Similarly, none of the young riders has been offered drugs by team-mates, trainers or others, and they have only a very vague idea of where they should go if they are interested in procuring such drugs. Mikkel, who rides for the under-23 national team, exemplifies this position:

One may suspect that some people are trying to do something. But I have to admit that I have never come across anyone who has offered me anything. So I find it hard to believe that it is so widespread, because I think I have been quite close to the top of Danish cycling, and I have never ever been offered anything or seen anybody do anything. So it seems a bit strange to me that it should be so widespread.

But let's imagine that you wanted something, would you know where to go then?

No, I actually wouldn't. Apart from the fact that you can go to your local gym and get something there if you want bigger muscles. But that's not of much use to me.

Anabolic steroids, which Mikkel expects to be able to find at his local gym, have been used (and are still used) by some riders. But his statement that bigger muscles are of no use to him demonstrates the kind of ignorance about these drugs which is characteristic of the young riders in general. This, and the denial of any personal experiences with doping, strengthens the impression that this is a group of riders who train and race without the assistance of illegal drugs.

The national elite

The use of doping among riders in the national elite also seems very limited. The positive tests over the last few years have primarily involved less potent stimulants such as caffeine and ephedrine. The riders in this group have brought the attitudes against doping they developed as young riders into the senior league, so they have only limited knowledge of the effect of drugs and where to get them. Part of the explanation for this is that, unlike the big professional teams, the teams for which the national elite race do not have their own doctors. That means they have no immediate access to knowledge about the effects of medical drugs, which is reflected in their view of the drugs as alien and

exotic. This makes some riders, such as Søren, talk about them with a certain awe:

I have no knowledge of doping inside of cycling. Maybe some people use something, but I know nothing about what drugs to take to get better. I've heard about EPO, of course, but if you don't know how to use it, you're no better off. Or you'll probably drop dead.

However, the lack of knowledge and fear of the drugs' effects are not the only significant aspects of these riders' attitude toward doping. Many of them are students, working part-time or are voluntarily unemployed. On the one hand, this provides them with the best opportunities to spend the necessary time on training, but on the other it means that their financial means are limited. It would thus appear that there are only a few riders in the national elite, if any at all, who have the financial means, knowledge and network to start using a drug such as EPO.

The international elite

The attitude among the very best Danish riders is that doping is a problem they do not want. Thus, the majority of the interviewees in this group claim never to have used illegal performance-enhancing drugs. But even those riders who have doped believe that it would be better if everybody raced 'clean'. The fact that they have not adhered to this ideal themselves is either due to being in situations where they were so exhausted physically that they felt they had to take drastic action in order to recuperate, or their ambitions have forced them to play by the same rules as their rivals. There is thus no reason to suggest that the current situation of the best Danish riders resembles what was happening in international cycling during the 1990s, when doping seems to have been widespread. [29] When asked whether he has ever used doping drugs, Martin, who has raced as a support rider on several professional teams, answered:

No. I know many people claim that it is impossible to race professionally without doping. But I was racing all the time, and I therefore felt that there was a great risk of being caught in tests if I had taken anything. And you can easily race without doping. I know so many riders who do. But I'm also sure that many riders have, in fact, used something.

The risk of being caught was due to the fact that Martin was a support rider. The support riders are in a situation where they are 'racing all the

time', as Martin says, and they rarely decide themselves which races they will be competing in. Even though they have scheduled breaks, they might still be used as replacements for sick or injured riders in races they are not supposed to be competing in. The top riders have more freedom to plan their season in order to give them the necessary breaks before the most important races. Those top riders who use doping are therefore able to make sure that they do not race at times when they know they would test positive. Support riders such as Martin do not have this option. Hence, the risk of being caught doping is much greater for support riders than it is for the stars. This is due to the fact that a rider can only test positive for EPO while being on a course of EPO treatment and for two to three days afterwards. [30] Most of the tests within cycling are carried out around the time of races, unlike other sports where two-thirds take place outside of competitions, since this is more effective. Cycling is an exception, as nine out of ten tests are carried out in connection with competitions.[31] But what about the unannounced tests that *do* take place around Europe? How do the riders avoid getting caught in these? The French paper *Le Monde* posed this question to the Cofidis rider Philippe Gaumont after it was revealed that he was a main figure in a major doping network:

[The tests] are not unannounced! They're carried out at the sites where we train as a group or at the races: so it's easy to get ready for them so you can be sure that you don't test positive. All the riders know that when they take doping drugs, they have to do it on the basis of exactly when they will arrive at the sites where we train or at the races to calculate when they have to stop. [32]

Thus it seems possible to avoid getting caught even in the unannounced out-of-competition controls. To the top riders, the risk of being caught in connection with an EPO treatment seems to be much less than it is for the support riders.

Some professional riders have chosen not to dope on account of the risk of being caught, and also because it violates their ethical standards. When asked whether he has ever felt tempted to dope in order to enhance his performances, Stig answers: 'No, never. You need to make up your own mind about that and decide what you want. It is, after all, only cycling. You need to stick with what you think and say that it's bloody unnecessary. That's all there is to it.' By saying that 'it is, after all, only cycling', Stig shows that, even though he is a committed professional leading a disciplined life that involves intensive training, cycling is not essential to his life. His ambition is not to win any of the great races but to

maintain his position in the bottom half of the hierarchy of his team. However, Bo's attitude demonstrates that not everybody takes this view:

I have wanted to be a professional rider since I was a boy, and now I have been given the chance. And if this means that I have to use medicine, this will not stop me from chasing my dream. I have not spent all these years cycling only to stop now that I have reached a point where I can fulfil my dream.

Cycling is more than a hobby for Bo, it is where he might fulfil his potential and his talent. The sport is essential to making his life meaningful, so it is far too important for him to give up just because he might have to use drugs.

To reach the very top in sport, it is paramount to have an ambitious and uncompromising will to victory, as Bo does, and perhaps even to view sport as the most important thing in life. On the other hand such an ambitious attitude means that doping becomes a factor that is comparable to diet, training, equipment and other matters that are important for optimal performances. You may not necessarily choose to practise doping, but you have to consider it carefully.

We need to critically challenge the idea that professional racing cyclists all belong to the same subculture in the sense that they share certain norms and values relating to the use of doping. They do not. What separate them are the various combinations of talent and attitude regarding how far they are willing to go in order to fulfil their ambitions. The interview material suggests that most professional Danish riders share the view that doping can and should be avoided. However, a small group of riders do not share this view. These are riders who compete at the highest international level. In the course of their careers they will revise their opinions regarding which resources they should use. In addition to their realistic view of the conditions in the international elite, their burning ambition and disciplined way of life make them choose to play by the same rules as the ones they believe their competitors play by. This means that at precisely defined times during their season, they choose to supplement their strict diets and intensive training with potent performance-enhancing drugs.

Conclusion

The many doping cases in cycling in 2004 and 2005 renewed the discussion about attitudes towards doping among riders. Within the sport there has always been an 'entrepreneurial' attitude towards medical

and technological developments. As a logical consequence of the dynamic development of modern societies, riders have, since the beginning of the sport, adopted the performance-enhancing technologies made available by modernity. However, since the mid-1980s the traditional approach to training and doping has changed. Scientific and medical supervision of riders has become increasingly common. The increased focus on the sport after the doping scandal in 1998, however, made the organized use of drugs within the teams impossible. Due to the crucial relationships with sponsors, it became necessary for team managers to deny any knowledge of doping. The riders' use of doping now had to take place through networks outside the teams. It is likely that this change means that riders encounter doping at a later stage in their careers than would otherwise have been the case. This is due to the fact that it takes time to establish the necessary trust and confidence upon which the outside doping networks are built. Thus there is good reason to reject the notion that professional Danish riders belong to one and the same subculture. The talented young Danish riders aspiring to become professionals distance themselves from doping and approach the sport with the belief that it is possible to be successful through legal means. The same can be said of riders who compete in the national elite and the majority of professional riders employed by teams around Europe. However, for a small group of riders the perspective changes in the course of their careers. The ambition and will to succeed on the international scene prompt them to establish contact with networks which are able to help them gain access to legal as well as illegal drugs. Furthermore, the dismantling of internal doping networks in favour of networks external to the teams implies that the role of the team doctor(s) has become more ambivalent. To the extent that they continue to provide riders with illegal drugs, they do not necessarily restrict their help to riders from one team. Even though many teams today emphasize the importance of cooperation and teamwork, this change in the doctors' work role points to the historically variable ways in which the various team members contribute to the functioning of an integrated unit.

Notes

- [1] The article is based on material from the author's doctoral thesis (written in Danish): A.V. Christiansen, 'Rene resultater: En kulturanalyse af cykelsporten – socialization, fascination, træning, kost og doping' ['Clean results: A cultural analysis of cycle sport – socialization, fascination, diet and doping'] (PhD. thesis, University of Southern Denmark, 2005).

- [2] These are sports that are on the Olympic programme. This means that sports such as rugby, baseball, American football and professional boxing not are included in this statistic.
- [3] Cycling had 486 positives out of 12,352 tests, boxing had 70 positives out of 1,904 tests, weightlifting had 110 positives out of 5,347 tests, athletics had 276 positives out of 18,876 tests, and football had 187 positives out of 20,104 tests. See WADA statistics 2003: Overview of results reported by the 31 IOC/WADA-accredited Laboratories, Table C, online at www.wada-ama.org/, accessed 8 November 2004.
- [4] We interviewed three groups of riders: a group of young talents, a group of professional and semi-professional riders and a group of former top riders: thirty-four riders in all. These are the interviews from which the views and quotations presented in this article are taken. Of course I know the identities of the interviewed riders, but all riders were guaranteed anonymity so that they could speak freely. Therefore, the riders quoted in the article appear under assumed names. A discussion of the problems involved in interviewing public figures about taboo subjects such as doping is included in my thesis: see Christiansen, 'Rene resultatet', ch. 3.
- [5] Benjamin Brewer, 'Commercialization in professional cycling 1950–2001: institutional transformations and the rationalization of "doping"', *Sociology of Sport Journal*, 19 (2002), pp. 276–301.
- [6] See for example John Hoberman, *Mortal engines: the science of performance and the dehumanization of sport* (New York and Toronto, 1992); Les Woodland, *The crooked path to victory: drugs and cheating in professional bicycle racing* (San Francisco, CA, 2003).
- [7] William Fotheringham, *Put me back on my bike: in search of Tom Simpson* (London, 2002), pp. 143–4.
- [8] Tom Donohoe and Neil Johnson, *Foul play: drug abuse in sports* (Oxford, 1986), p. 6.
- [9] Fotheringham, *Put me back on my bike*, pp. 169–70.
- [10] Brewer, 'Commercialization in professional cycling', p. 285.
- [11] Les Woodland, *Dope: the use of drugs in sport* (London, 1980), p. 58.
- [12] Willy Voet, *Breaking the chain: drugs and cycling, the true story* (London, 2001), pp. 36, 40.
- [13] Brewer, 'Commercialization in professional cycling', p. 287.
- [14] Conconi's own account of how the hour record was beaten can be found in F. Conconi, *Moser's hour records: a human and scientific adventure* (Brattleboro, VT, 1989).
- [15] Paul Kimmage, *Rough ride: behind the wheel with a pro cyclist* (London, 2001), pp. 97–8.
- [16] Voet, *Breaking the chain*, pp. 49–50.
- [17] Robert Voy, *Drugs, sport and politics* (Champaign, IL, 1991), pp. 70–3.
- [18] Brewer, 'Commercialization in professional cycling', p. 287.
- [19] Voet, *Breaking the chain*, pp. 49–50.
- [20] In the spring of 2001, the Danish rider Bo Hamburger became the first rider to test positive after taking the EPO urine test. But now there is also a test against the technique of blood doping. Thus, the American Tyler Hamilton from the

- Phonak team was the first rider to test positive for blood doping in September 2004.
- [21] Ivan Waddington, *Drugs, health and sport: a critical sociological perspective* (London, 2000), p. 141.
- [22] Alessandro Donati, 'The silent drama of the diffusion of doping among amateurs and professionals', in John Hoberman and Verner Møller, eds., *Doping and public policy* (Odense, 2005), p. 51. In March 2004 a judge in Ferrara pronounced Conconi guilty of having aided and abetted in the EPO doping of many athletes (John Hoberman, 'Doping and public policy', in Hoberman and Møller, *Doping and public policy*, p. 11). Similarly, on 1 Oct. 2004, Michele Ferrari received a twelve-month suspended sentence for 'sporting fraud' in connection with a major drug case. However, he was acquitted of distributing doping products which could endanger health ('Ferrari found guilty of sporting fraud', *Velonews*, 1 Oct. 2004).
- [23] Donati, 'The silent drama', p. 53.
- [24] Christof Weiss, (ed.), *Handbuch Radsport: Geschichte und Entwicklung, Freizeitradsport und Radrennsport, Technik und Training, Ernährung und Medizin, Ausrüstung und Material* (Munich, 1996), and R.J. Gregor and F. Conconi, eds., *Road cycling* (Oxford, 2000).
- [25] Dominique Marchetti, 'The changing organization of the Tour de France and its media coverage: an interview with JeanMarie Leblanc', in Hugh Dauncey and Geoff Hare, eds., *The Tour de France 1903–2003. A century of sporting structures, meanings and values*, special issue of *International Journal of the History of Sport*, 20 (2003), pp. 54–6.
- [26] 'Spaniard says blood was doped', *The Guardian*, 25 March 2004; 'EPO still widely used, claims Manzano', *The Guardian*, 26 March 2004.
- [27] Waddington, *Drugs, health and sport*, p. 159.
- [28] Normal haematocrit levels (the percentage of oxygen carrying red blood cells in the bloodstream) for untrained men are approximately 42–45. With intensive endurance training this level will typically fall, rather than increase. However, a value of 36 indicates anaemia.
- [29] Voet, *Breaking the chain*.
- [30] R. Kazlauskas, C. Howe and G. Trout, 'Strategies for rhEPO detection in sport', *Clinical Journal of Sport Medicine*, 12 (2002), table 1, p. 233. These data are valid for the EPO urine test as it worked until the end of 2004. From the beginning of 2005 WADA has substituted the so-called 80 per cent limit with a qualitative judgement: 'suspicious' or 'very suspicious'. This is done in order to give the national federations the possibility of making decisions about sanctions in the light of the total analytical result, and not only from the question of whether the test result was above or below the 80 per cent limit.
- [31] Christiansen, 'Rene resultatet', p. 277. These are figures from Anti-Doping Denmark. I have not been able to find international data that compare cycling with other sports regarding the frequency of out-of-competition versus in-competition controls, but Gaumont's statement below indicates that the European figures do not differ a lot from the Danish.
- [32] 'Selon Philippe Gaumont, les coureurs se jouent des contrôles', *Le Monde*, 15 March 2004.