Where The Law Comes From: You Don’t Mess About With The People

It is very easy to disparage the rule of law, but as a forensic scientist you need to know two things. The first is that it does rule; the times of arbitrary rules come and go. We always seem to come to the same conclusions as despots come and go – that the rule of law is the most important glue that sticks a society together. The second is that a forensic scientist has a duty to their subject and the people they serve – this does not mean the payers of wages, or even the formulators of laws, but society and truth.

It is generally thought that the English legal system and therefore the legal system extant throughout the old colonies and the Commonwealth originated in Greek and Roman law. The situation is a little more complicated than that, but this is what we shall explore.

It is important to realise that laws, real laws, have a sound philosophical basis. There are many accounts of the origins of the rule of law, common law. It can be said in the West that our ideas of law stem quite clearly from ancient European philosophies. During the fifth century BC Athens was at its height of power and was also a political system directly ruled by the citizenship. Indeed, the now widely used and understood word Candidate refers to the citizens of Athens who were eligible and canvassing to become senators – they
wore white. The other time you may have seen this use of the Greek derivation is *Candida albicans*, referring to the white discharge caused by that fungal infection.

This association between the Greek heritage and modern European usage even extends to our word *Police*. This is from *Polis*. Now, in modern terms it means exactly what you understand it to do. But in Greek and some other regimes it was the political community, even the body politic, and elsewhere this has been transformed into the *Politbureau*, which was a political instrument, not necessarily for the good.

So what we see in Athens over 2000 years ago was a system where any male citizen, of any age or status, could sit as a magistrate, juror or on the governing council. There was no system or set of individuals who ran the law, so equality was a fundamental part of the way in which the law was handled and administered. This, as we shall see, is the way in which the common law has developed and evolved in the United Kingdom but with some surprising twists and turns for the forensic scientist.

What has happened so often with discussions of the history of law is that it can become a little bogged down, not in detail but in philosophical points. This is not what we need to know. What we need to know is who wrote what and when and also why? Unfortunately the growth of the law is as complicated as the growth of an organism and just as convoluted. In the Greek system, although there was great pride in the state being a true democracy run directly by the citizenry, it was not an egalitarian society. Certain groups were treated differently from each other, the second class being primarily children, slaves, non-citizens and women. It was also true that any male citizen over the age of 30 could become a paid juror or a magistrate. Where equality did reign was in the application of the law *within* any given group. As you can readily imagine, such a system might easily be corrupted. To guard against this the law was set apart from the legislature, a situation now routinely held to in enlightened secular societies. Consequently the courts are there to interpret and respect the law while maintaining its integrity, they are not there to make law arbitrarily. This does sometimes appear odd when apparently strange happenings are reported in the press, for example when a rape victim is put through the ordeal of being cross-examined by the accused. The judge cannot stop this because it is the law that an accused can confront their accuser and carry out such a cross-examination if they so wish, even if the result is repugnant to all those present.
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As time moved on and Athens lost power, but not wealth, three very clear-thinking philosophers emerged. Socrates, who was condemned to death by the democratic process, taught Plato, who taught Aristotle. These three produced seminal works on ethics and law. For the curious these books are always available, but I must say quite hard going as they focus on law as a philosophy. They do, however, have very important things to say which resonate today as true and valuable. For the reason that after 2000 years their words still seem to be valuable guides, it is worth just contemplating what the main drive of their collective thesis was.

In broad terms, and briefly, law was seen as transcending changes in fortunes within a state or country; it was seen as immutable and based on some fundamental principles which could not be changed. This is particularly interesting because it is easy to think of laws as simple instructions such as ‘do not cross the road when the light is red’. But this misses the point. This injunction is a simple instruction, but has an immutable principle behind it, which is to cooperate with your fellow citizens. Plato insisted that government should be subject to the law, indeed held accountable to it, not the other way around. This inevitably makes for a slow and turgid legislature, but also one which, generally, upholds the values of the individual. Aristotle added a significant item to this when he insisted that law should essentially be a product of reason, not of passion, or, as we would probably say in the twenty-first century, a ‘knee-jerk’ reaction. When Plato and Aristotle were working, thinking and contemplating, they came to a conclusion which none would dispute, could possibly dispute, except the tyrant and self-deluding dictator – that is, that The Law is there to further the good of the community and enhance the moral virtue of the citizenry. This is most obviously epitomised in every legal system which is written down: murder is forbidden. There are, in fact, few rights which are regarded as absolute, rather than those bestowed by government or custom, but not being maliciously killed is one of them.

It all comes down to what is just is lawful and fair; this is the position of both Plato and Aristotle. Realistically this cannot be gainsaid, otherwise you are a dictator.

So after the Athenian system and decline of Greek power there arose a new force – the Romans. They, too, had an influence down the ages on the way in which law has been expressed. Cicero wrote much along the same lines as Plato and Aristotle that a republic may have a king, but the king must abide by the law, the same as every citizen. Broadly, Cicero held all that was Athenian
to be true regarding the law, though not when it came to political thought regarding government. It is unfortunate that what transpired within Roman law was a shift away from what we would now regard as true and fair into an arbitrary system of law. This was epitomised by the Justinian edict within written statutes that the prince is not bound by the laws (for prince, here, read emperor).

With the decline in Greek and Roman influence on the history of Northern Europe a strange and interesting change took place. This was primarily a development of a concept that had been written down in ancient Greece – that laws stood even when rulers fell. Even so, there was always the possibility for tyranny and this did happen.

There is a period which for convenience sake we tend to describe as the Middle Ages. This is for no sensible reason other than the whim of historians. It is usually said to have started about the fifth century and ran for a thousand years, until the Renaissance. The fifth century was about the time that the Roman Empire collapsed, and here is an interesting aside. It has been suggested, quite seriously, that while the Greeks and Romans were very good at fundamental thought, such as Euclidean geometry and philosophy, they used old technology. Yes, it was good, but it was also just a refinement of technology that had been used for centuries; it was not innovative. The ability to build a bridge of unsurpassed strength was well known, but only of short spans, for example. Had they ventured to look at the application of their science, new materials, better materials, would undoubtedly have been the result and with that the development of a unified Europe a thousand years earlier than it took to achieve. But they were essentially tribal and while sophisticated they were also brutal; the result was the ‘collapse of stout party’, in this case the Romans.

So, we have the Middle Ages, with the first few centuries described as the Dark Ages. This was marked by wars and invasions from the east and Germanic tribes. I will not go into the history, that is for you to do if you are interested, but it is worth noting that some of these tribes have left us with words which now epitomise negative aspects of civilisation. So we have the Huns from the east and then the Goths, Visigoths and Vandals from Central Europe. They were all acting against an historical oppression without thought. The devastation of Rome did not have any positive result and when the followers of Mohammed decimated North Africa and southern Spain and France, the trade and contact between civilisations slowed down. At the same time the Vikings were working their way south. This is also quite interesting, in that
in the UK a number of words and names have been incorporated into the language. A good example is the surname Vara, or Varo, which appears on the east coast of England; this is a name of Viking origin and quite distinct from such names as Smith and Archer which are Anglo-Saxon.

To return to how the law evolved, with the collapse of the unified Europe of the first millennium, small systems of law arose, based upon a rule of nothing more than bullying. This took the form of not just physical manipulation of the population but also taking advantage of the financial and social collapse of the Roman Empire. The general way in which it worked was that during the ninth and tenth centuries despots arose who usurped power from the citizenry. This was done by controlling land and labour by force; if you control then you rule, *ipso facto* you make the law. This was not a happy position to be in if you were on the receiving end of a dictator. Let’s make it clear that during this period of European development there were a lot of petty dictators who ruled by their own set of rules; Socrates, Plato and Aristotle might never have existed, but the principles still existed. It is almost a solipsism that if Socrates, Plato and Aristotle had not existed, somebody would have come to the same conclusion – that there are things an individual or state cannot do to another member of society with impunity, that is to be a tyrant or bully.

Although this feudal system did put virtually absolute power into the hands of a small number of land-owning gentry, lords and their vassals over the serfs under their control, there was also an element of the lords serving the serfs. So the rulers would intervene in disputes and make judgments and also offer protection to their serfs against marauding groups of thieves as well as providing for them during times of hardship. This made a lot of sense, for while the serfs were under the power of the lord and his vassals it was implicitly recognised that without this workforce on the land and being able to raise armed forces in times of strife, the lord was an empty vessel. In this system the Church played an increasingly important part – as lords with huge amounts of land. This was often achieved by bequests and resulted in some of the larger bishoprics having a bishop who was effectively a baron.

Throughout the Middle Ages the only presence which spanned the whole of Western Europe was the Catholic Church. This entire medieval period was essentially mud and marble: mud for the serfs and marble for the lords. It was a time simply of survival, of utility without the scope for improvement. During this period, around the thirteenth century, a book was produced which has resonated down the years and is well worth reading, in translation from Latin, that
is *Summa Theologia* written by Thomas Aquinas. He resurrected the thoughts of Aristotle regarding the law. It was this influence that the Catholic Church played upon as virtually every individual in medieval Europe was a Catholic, including kings and princes, and was deemed therefore to owe fealty to the Pope, who claims direct succession from St Peter. This was about as unifying as Europe got for a long time, but it did mean that there was a certain amount of unity in the law, though, it has to be said, not a great deal.

During this period there developed a system called customary law. This is particularly interesting because it held that kings were under the law, even though customary law was not generally written down but claimed to an ancient heritage, which in times of short and brutal lives was important. Even when these laws were written down they were seen not as new laws but as codifying existing ancient laws. During this period an uneasy situation began to settle upon the law givers with the dawning realisation that without ever-increasing lands and serfs there has to be a truce, of sorts, which means that the law should stand for everyone, with no exceptions. It was essentially this idea which resulted in a most famous document being produced, namely Magna Carta. It was produced and signed in 1215, about 10 years before Thomas Aquinas was born, and heralded a distinct change in attitude to the law. In that it is very significant; in the detail of its content it is far less so.

We need to go back a little in time to put this document into context, before we look at the relevant detail for the law of today.

By 1199 England had become a powerful state run by a monarch, and this state included parts of what is now France. The inability of King John to defend his holdings in France meant that there was considerable pressure to raise revenue to cover the costs of his defence. This led to extortionate taxes, and remember that while this was the king’s prerogative, lords, barons and free men could hold the king accountable. So when the activities of the king became arbitrary and potentially extreme, a group of barons did something which was unprecedented – they held the king accountable for his actions.

Although we think that Magna Carta is somehow pivotal in the democratic rule of law, it was really a signed statement of ‘sorry, I won’t do it again’ from the king to his barons. There was very little in it for the populace.

Magna Carta is Latin and means literally Great Charter. The text is written in Latin. This is of interest because, while illiteracy was widespread among the general population, the only common language among the groups that held power was Latin; they could read it, but not always talk in it. There were so
many different languages among the people that the best *lingua franca* for written communication was Latin.

Magna Carta was signed at Runnymede. We know this because at the bottom of the document the last section runs ‘Given by our hand in the meadow that is called Runnymede, between Windsor and Staines, on the fifteenth day of June in the Seventeenth year of our reign.’ That was 1215. The run-up to this momentous event started long before 1215 with King John unable to defend what would now be seen as overseas holdings, which led to extortionate tax demands and reprisals against defaulters. Further, it was thought that his administration of justice was quirky and unreliable. Against this backdrop a group of barons demanded a charter of liberties against the behaviour of the king. This was early in the year, but nothing happened and so they took up arms and captured London in May of that year. Negotiations started on 10 June and finally produced the ‘Articles of the Barons’, the Great Seal was attached and the situation went back to normal. Then, after the document was signed and sealed it was taken to the Chancery and formalised into what we now know as Magna Carta (it is not normally prefixed by ‘the’). The Chancery not only produced a formal document, but also made copies. The exact number is unknown, but it is said that they were distributed to bishops, sheriffs and some other worthies, so there must have been quite a few. However many there were, we do know that four of the original edition survived. It is now unlikely that there are any more copies remaining undiscovered, but you never can tell. During the copying process, changes were made. We know this because each of the surviving four are all slightly different in small ways, in size, shape and text, with what appears to be last-minute revisions at the foot of one document being incorporated into the body of the text of another one.

The influence of Magna Carta is considerable, even to the US Constitution and Bill of Rights, but it should also be remembered that Magna Carta was reissued after the death of King John in 1216 and again by Henry III, the tendency being for the charter to be gradually shortened. Although in translation it is usual to divide Magna Carta into paragraphs, it was actually written as solid text with no breaks. Before moving on to the areas which directly impinge on forensic science, there were a number of very precise clauses which are worth a mention, such as ‘no widow shall be compelled to marry’, ‘all fish weirs shall be removed from the Thames’ and ‘there shall be a standard width of dyed cloth, russet and haberject, namely two ells within the selvedge’. At that time standard units were not very common, so all we can say is that an ell
was about 45 inches in England and 37 inches in Scotland, or about 114 cm and 94 cm respectively.

Although Magna Carta started a movement and trend towards the rights of individuals not to be interfered with by an uncontrolled monarch or dictator, there are very few parts of the Great Charter which are still in force today. One is supposed to guarantee the freedom of the Church in England. While this is generally true, it should be remembered that Henry VIII not only closed many monasteries down, but changed what was a Catholic Church into the Church of England. There is also a section which states that the City of London shall retain all its ancient liberties, along with all other cities, boroughs, towns and ports, which shall enjoy their own liberties and freedoms. This indicated that the City of London was regarded as a special place. The only other remaining clause is the one which is of greatest significance to the individual and especially anyone dealing with matters forensic. Simply put in translation:

No free man shall be seized or imprisoned, or stripped of his rights or possessions, or outlawed or exiled, or deprived of his standing in any other way, nor will we proceed with force against him, or send others to do so, except by the lawful judgement of his equals or by the law of the land. To no one will we sell, to no one deny or delay right or justice.

So there it stands, no imprisonment without trial and no corruption in the system.

Because some of the charter’s contents are associated with righting specific wrongs, with individuals being named, the charter was occasionally updated and reissued.

For centuries Magna Carta held a position of influence on the law. This was not to everyone’s liking and the level of influence waxed and waned through the centuries. A big change occurred in 1828 when the first Offences Against the Person Act was passed by Parliament and in so doing repealed a clause of the charter. The significance of this event was that until that time, whatever personal feelings were involved, the popular concept was that it was an inviolable base upon which the law stood. Once this hurdle had been cleared it was a relatively short period of a century and a half before all but the parts remaining today were repealed.

This document had one other effect, of a form which is in a way surprising, since it inspired the production of the first attempt to review the whole
of English law. The significance of this is that until this time the law was, essentially, piecemeal. The man involved was probably Henry de Bracton, his work now being referred to as simply ‘Bracton’, but it is also true that he was from the West Country in England and that names were rather more fluid than we consider them today, so he was probably named Bratton originally. Although his early years remain temporally distant and vague, we do know that when he died he was buried in the nave of Exeter Cathedral in 1268. Besides taking assizes he was also variously rector of several places, including, in 1262, Barnstaple in Devon. Later he became Archdeacon there and eventually Chancellor of Exeter Cathedral. This is of interest because at this time it was common for senior figures in most professions to be ecclesiastically trained as well. Indeed, well into the nineteenth century it was normal to be qualified in matters clerical as well as your chosen subject if you wanted to be a lecturer at one of the older universities in England.

Now, what Bracton did was remarkable. He seems to have started as a justice in 1245, not so long after the signing of Magna Carta, and then carried on until his death. Most of his judicial work seems to have been in the south-west of England – Cornwall, Devon and the like. What brings him to notice here is his work *Bracton on the Laws and Customs of England*. This was the first attempt to make sense out of a rather ragged system of laws. It was written in Latin, as so much was at the time, remembering that when I say written in Latin, I do mean written by hand in Latin. There was no printed work in England until the fifteenth century. But even after 300 years Bracton’s work was so important that it made it into print, the first edition being produced in 1569. It was still in Latin and remained so until a translation was produced between 1878 and 1883, but still with accompanying Latin text. Even during the thirteenth century an attempt was made to expand the influence of Bracton by translating it into French, the reason being that the nature of the document was based on Roman law, as were most systems in Europe at that time. It is easy to forget that the printing press using movable type was not found in Europe until Johannes Gutenberg invented it between 1436 and 1440. Printing was used in China long before that, but in a different way. Gutenberg’s first project was an obvious choice for a deeply religious period – the Bible. England was not far behind with Caxton starting to print books at Westminster in 1476, the first being produced in 1477. A year later printing was underway in Oxford, which eventually through twists and turns over a hundred years gave rise to Oxford University Press.
The period during which Bracton was producing his work was a turbulent time in England and it would seem that while Bracton tried to codify the laws that were in place he was ultimately thwarted by having been asked to return some of the material which he had used as primary sources for his treatise, so it was unfinished and possibly not entirely his own work. Nonetheless it stands out as a seminal work of English law. Interestingly, one of the more arcane areas which he discussed was associated with money lending and debt. This was a big topic at the time because there simply was not a huge amount of coinage in circulation and certainly no banknotes. So although a baron may be a wealthy man, it was in terms of land and property rather than cash. Consequently, when relatively large amounts of cash were needed it was necessary to borrow it; this even went as far as the king. So money lending was, as now, important and the regulation of the process necessary.

It is of interest that paper money was in circulation in or around 960 in China, the Song dynasty, but did not appear in Europe until Stockholm Banco produced it in 1660. In England it was 1694 before paper money appeared. For many years it remained as promissory notes, ‘I promise to pay the bearer on demand the sum of one pound’, the piece of paper representing the money. Now, of course, the piece of paper is the money.

Bracton goes into some considerable detail regarding the almost philosophical aspects of this regulation, starting with the borrowing of money or goods by one person from another. This process, the borrowing and repayment, was settled without forensic evidence by the testing of oaths, compurgation. The borrower swears they either did not borrow the money, or that it was repaid. The borrower’s neighbours do likewise and so, if the borrower is more plausible than the lender, the person said to have done the borrowing walks away without the debt, but like so many such cases there are really only two people who know the truth, the lender and the borrower, now the alleged borrower. This, as can be imagined, was an area in which there was inevitably going to be ill feeling whoever won and this would often be directed at the court as well. In more serious cases, those which might involve physical violence for example, at the beginning of the thirteenth century an outcome could be arrived at either by battle or trial by ordeal. Ordeals came to a relatively abrupt end in 1215 with the publication of a Papal Canon forbidding the involvement of priests in trials by ordeal. Until then it was customary for a priest to be employed to encourage the fire or water to distinguish between the guilty and innocent. So of three potential methods of determining guilt or innocence,
that is battle, testing of oaths (called at that time compurgation) and ordeal, one was now no longer available. This led to a rather unusual state in that the accused, languishing in jail, still had to choose to be held to account by a jury, rather than have their oath put to a divine test. This resulted in a lot of space being taken up in prison by individuals who did not make such a decision. Beyond that it remains largely unknown as to what lengths the proceedings in court went to find the truth. What we do know is that courts were largely local affairs, counsel for the defence virtually unknown and verdicts simply stated in the plea roll as guilty or not guilty. So it is quite likely that without direction, not only were the courts local affairs, but so too the administration and interpretation of justice.

When the judge was asked to direct the jury on an issue that was of particular significance or difficulty, it would not have been unusual for the case to stop while the judge acquired information and insight from colleagues in London. Even under these circumstances it would have been quite normal for the debating lawyers in London to take their initiative from the opinions and attitudes of laymen. It should be remembered that the rule of law is not applied to society – that way lays tyranny – it is constructed out of the minds of those at whom it is aimed, and so constructed that the constructor accepts it as ruling them as well as everyone else. This even extends to the monarch. It was the introduction of jury trials in a more widespread manner that started to upset the rising merchant classes. Swearing an oath for a religious individual is an activity not to done without certainty; if you believe in a literal heaven and hell, damnation becomes a reality. The merchants were not happy with the erosion of oath-swearing because their entire basis of activity was honesty and trust, and their word was the only assurance they considered necessary for a deal to be struck. In a way this was rather odd, because what they were doing was breaking a stranglehold which had been the basis of society from its very beginning – feudalism.

The feudal system more or less gave landowners rights over individuals who worked for them, but by the end of the thirteenth century this had changed beyond recognition; changes continued long after, but the seeds were sown. In a feudal system the nobility have status, power and wealth, but the wealth is in land and production. The rising merchant classes, so despised by the Church for their base use of commerce, were wealthy in what we would think of as a modern way – they had money, probably no land, although that was always seen as a status thing, and financial leverage which the nobility lusted after.
The merchants were therefore no longer controllable in a feudal system and the merchant laws, set up by merchants and for merchants, ended up as part of the broad body of common law. The nobles were a bit hacked off about this, but that is evolution and evolution is what the law was going through.

So what we have at this point is a muddle – a muddle because different groups are dispensing justice based upon different ideas. There is no written constitution to fall back upon, only the unwritten one based on documents such as Magna Carta and the Act of Habeas Corpus, among others. The process of developing the law was slow, but that is why it has a solidity and can be easily transported from place to place. This is also why violations of human rights and war crimes can actually be put to trial, because there is a moral right for every individual to stand up and say when there has been a wrong committed, or when they do not agree with the outcome of a case. In the case of human rights the problem may creep up on the forensic scientist. Consider this: that the law is based upon a robust concept of fairness, natural law, the idea that you can say that something put upon you is unfair. That is reasonable; you may not be able to articulate exactly why it is unfair, but you know that it is. So what happens when you know, as a forensic scientist, that the outcome of a court case is wrong? You stand up and shout – that is your duty to the law and, more importantly, to society.

As time went on the rule of law became pre-eminent and was based on the notion, somewhat arbitrarily, that the people governed by the laws not only must agree to them, but in so doing in some way wrote them. It was in this context that philosophical arguments arose about the nature of the rule of law and the structure of society. This was a period which effectively returned to the questions asked in Rome and Greece centuries earlier. Now the philosophers were notables such as John Locke, Thomas Hobbes and David Hume. The arguments were legion and well rehearsed so that a remarkable thing happened in the English legal system. Although for centuries, more or less until we joined the European Union, there was no written constitution, there was also no written statement of the rights of an individual. The common law was supposedly the product of gradual evolution of ideas through time. The common law rules for the majority of offences and misdemeanours applied to all citizens equally, whether they were private individuals or civil servants. So although there was not a document in the same sense as the US Constitution, there was an unwritten constitution based on various documents, such as Magna Carta and some of the more robust pieces of legislation which
determined the length of a Parliament and the relationship between monarch and Parliament.

All this meant that modernisation of the law, the power of rule, came much earlier to England than elsewhere in Europe. It was a situation where the rule of law was essentially centralised, but carried out locally. In contrast, it was common for local systems of rules and regulations to be used on mainland Europe and even when there was a central process of appeals it would be usual for the appeal to be heard in the context of local customs and governance – more like a teacher holding sway than a headmaster stating an absolute truth. Not that they do, but you get the idea.

During the period from when Bracton was produced to the nineteenth century there were many things which occurred to change laws and cause what could have become major upsets had the rules been strictly applied. One such is the idea that it was mandatory for adults to undergo archery practice. This was indeed the case during the reign of Henry VIII, but the ‘State Law Revision Act’ of 1863 stopped all of that, and further clear-ups took place with the Betting and Gaming Act of 1960 which removed many such arcane rules and regulations. The development of English law has many such tales to tell and they should not be dismissed lightly. While many states may pride themselves upon a constitution, it was the gradual development of the centralised rule of law which gave the English system such robustness and flexibility. The most obvious problem comes from cases such as the USA where there is a constitutional ‘right’ to bear arms (remember that everyone has the right to bare arms). Because it is written into the constitution it becomes very difficult to alter it – even when common sense declares that it is no longer appropriate to have a gun and the availability of weaponry capable of high-speed destruction is available, when it was not at the time of the constitution being written.

But let us go backwards a little. Reform of the criminal law took place in and around 1830, but prior to that, although the concept of fairness had been employed, what had not been valued was what Gilbert and Sullivan would describe as ‘let the punishment fit the crime’:

My object all sublime
I shall achieve in time –
To let the punishment fit the crime –
The Punishment fit the crime

—1885 Mikado Act II
Two notable features of punishment stand out: the first is transportation and the second is capital punishment. Let us look at capital punishment first. It started out as a condemnation of the soul, so the more brutal and humiliating against the religious beliefs of the individual, the better. This was not for the benefit of the condemned, but to deter others and make the family aware of the heinous crime that was committed. Sadly it was generally little more than ritual murder in itself, of no value and with no place in a civilised society.

During the early eighteenth century, in England there were approximately 200 crimes for which you could be sentenced to death. Now, no matter what your personal philosophy is regarding institutionalised death, I maintain that it is unlikely that you could genuinely come up with even a quarter of that number of legal transgressions for which you could justify killing someone. During the whole eighteenth century there was another factor which became involved in the administration of justice. This was fear. Remember that guilt or innocence is separate from sentencing, so what we find during this period with minor crimes being given the death penalty is that there had to be a gradation in the severity of that penalty. Today we would describe it as cruel and unusual punishment, or torture, but then it was the deliberate installation of fear. So in 1752 there was a trend towards instant execution upon conviction, at least within two days, which rendered the possibility of an appeal hopeless. At the same time the prisoner was held in solitary confinement on bread and water. So there was no possibility of appeal, comfort or saying goodbye to your family. It was also deemed necessary that the guilty party should suffer in both this world and the next, hence the installation of fear.

Just so that you are aware of how inhuman the law could be, and remember just how much has happened on every continent in the world since 1700 England, let us have a look at what went on then, compared with now. But also remember that some things which you, as a forensic scientist, will be asked to investigate will appear medieval, and not all political regimes are straightforward and honest. You always report what you find, not what someone else would like you to find.

The fear, mentioned above, was based on the idea that since relatively minor offences could carry the ultimate penalty, such as vagrancy in soldiers and sailors, letter stealing and sacrilege, it was deemed necessary to create a punishment which was even more severe for more horrific crimes. This was obviously difficult, but the ingenuity of Parliament was up to the task, with further terrors for the criminal. This consisted of the body being handed over
for dissection, or the body was to be hung in chains and all the convict’s lands and goods were to be forfeit. It was this which struck the most fear into the convict. Women could be dissected, but not hung in chains. It did, in fact, become worse for some crimes, because of the nature of the execution. Some of these crimes were coining, that is counterfeiting, or petty treason, that is the murder of a lord by a vassal, or a husband by his wife. In the case of a woman the sentence was that she would be, originally, dragged through the streets, but later in a cart, and then burnt until she was dead. Although strictly against the rules of interference, the executioner was often instrumental in shortening the suffering by strangling the individual first. This brutal method of death, put your hand in a flame and then consider the outcome of progressive immolation, was changed in 1790 to hanging instead; the last burning was carried out in 1789.

The number and severity of conditions under which death was the penalty slowly decreased until by 1957 there were only five clear charges which carried the possibility of death. These were two murders committed on different occasions, murder in the course of a theft, by shooting or causing an explosion, resisting arrest or during an escape, or murdering a police or prison officer. Finally, in 1969, Parliament abolished capital punishment for murder. The thing to remember about this is that while you can restore freedom to an innocent individual, you cannot restore life to one. Unfortunately, it is without doubt true that miscarriages of justice have taken place which resulted in a person’s execution; it is also true that a person might be guilty of the offence as charged, but should that result in their execution if it was a case of trivial larceny?

An alternative to the death penalty was transportation. Now, this is often thought of as transportation to Australia, but this is not how it started. Transportation to the Caribbean colonies was also a common mode of punishment. It was during the late eighteenth century and early nineteenth century that transportation was at its height, at least as a sentence. Many of those sentenced to transportation had the sentence reduced to a rather more minor punishment, or were not transported at all. With the American War of Independence in 1776 it became impossible to transport convicts to the Americas, so Australia became the destination of choice, except, of course, with the convicts themselves. It was the Transportation Act of 1718 that codified the process of transportation. The reason for this was not, as is sometimes reported, that it provided cheap labour for the growing colonies, which it did, it was more about trying to eradicate the criminal element at home. Other punishments just did
not seem able to stem the tide of criminal activity and so for offences which were not capital, or where a capital offence had been pardoned, it was normal for transportation to be substituted. This was generally 7 years for a non-capital offence and 14 years for a commuted capital crime. Returning from transportation before the term of the sentence was completed would result in hanging. This was a rare event simply because it would be hard enough to find a passage and make your way home – the possibility of being identified afterwards was remote.

It did not take long after 1718 for transportation to be seen by the judiciary as a very expedient method of getting rid of both first-time offenders and recidivists. At this point, what had previously been short and sharp penalties turned into transportation, for approximately 50% of acts of thievery. So between 1718 and 1776 it was a common form of punishment to transport convicts to the American colonies. This was suddenly curtailed in 1776 and the problem of what to do with the convicted started to be come a problem on a massive scale. The prisons were full of prisoners sentenced to transportation, but with nowhere to send them. Many of them ended up on floating hulks on the Thames in London and in the harbour at Portsmouth on the south coast. The outcome of this was that the government of the day decided that the armed forces were the best place for these individuals; some were pardoned and some were deemed to have served an adequate sentence and were therefore released back into an unsuspecting society.

After the end of the war in the American colonies it was assumed, incorrectly, that transportation would resume, but of course it did not – the newly independent states were not about to start taking what was seen as the social dregs of England. What was to be done? The realisation dawned that Australia had potential, even if it was further away, and also needed cheap labour. In this period it was still seen as legitimate to control, or try to control, criminal activity by the use of fear. There is no doubt that transported individuals suffered greatly, both in their passage and upon landfall, but transportation was not always recognised as that, being seen as an excuse by the authorities to imprison individuals in conditions of hard labour for the duration of their sentence, a much longer period than would have been suffered in England.

A problem, not foreseen by politicians, was that after the Napoleonic wars there was a huge increase in demobilised servicemen with no money and no jobs, so by 1815 crime was on the increase again. Consequently transportations started to increase as a standard part of the panoply of punishments. This
went on for some considerable time until a change took place in Parliament which meant that laws were rather more enlightened. Laws expressly for the benefit of the landed or moneyed were gradually being reduced in favour of a softer, more concerned regime. There would, however, be considerable time between 1850 and the point when it was clearly understood that Parliament and the social order were at the will of the people and not just monarchs and lords. When transportation effectively ceased in 1863 there were people born who would be alive and kicking in the First World War, and for many of them would be senior policy makers. This caused a change in policy that lasted throughout the twentieth century. It may or may not have been motivated by the problems of the 1850s, but what is certain is that a mixture of technology and politics resulted in the Defence of the Realm Act (DORA). We have seen that government had recognised that it was essentially running the country for the population, rather than itself, but there was also an increasing realisation that at times of war in the twentieth century ordinary measures would not necessarily be enough to protect the nation. During the early weeks of the First World War, in fact on 8 August 1914, DORA was introduced to the country; it was short and was quickly superseded by the Defence of the Realm Consolidation Act on 27 November 1914. Although it was longer, the broad content was the same. DORA contained some interesting and to us slightly odd legislation, but some of it remained in place long after the end of the war and as times changed with rapidly changing technology, by the time of the Second World War a similar piece of legislation was introduced. Some of the contents of DORA which were introduced were such things as no lighting of bonfires, letting off fireworks or flying kites. These were all seen as possible means of attracting zeppelins – not a problem that was going to persist into the Second World War, when the problem then would be enemy aircraft. The rest of the legislation was designed with two primary things in mind. One was to control the means of production and the other was to maintain the nation by denying information to the enemy. These two aims were backed up with the right of government to prosecute individuals with either summary jurisdiction for minor transgressions or, in more serious cases, courts martial. These court systems were there to cover transgressions of the legislation which fundamentally changed the social attitudes of the twentieth century. This is an important point.

Legislation by government can and does change social attitudes, since these are laws which make fundamental differences to the way in which we think
and act. This is the way in which legislation has developed during the twentieth century: as paternalistic, but sometimes misguided. One piece of legislation which we still have is for the protection of products from being counterfeit and more recently wholesale copying of an intellectual product, such as music or printed works.

**Paternalistic help for commerce**

As the Industrial Revolution became a massive producer of wealth, so the owners of recognised brands wanted, much as they do now, to protect their image from counterfeit products of lower quality. One way of doing this is to have a symbol, or name, which only you used, but what would stop another individual copying the symbol? Well, nothing until the trademark was introduced as an enforceable item by a government which was increasingly aware that commerce not only was important to the nation, but carried considerable weight when it came to vexed questions. So the trademark was born in 1876. Trademark number one was not for a long-forgotten mechanism or heavy industrial company, it was for a beer. Although used since the 1600s, trademark number one was the red triangle of Bass Pale Ale. Interestingly this has been immortalised in the last major work by the French artist Edouard Manet. Painted in 1882, a year before his death, *Le Bar aux Folies-Bergeres* features exactly what it says, the bar, tended by a rather bored-looking barmaid. On the bar can be seen a bottle of beer with the clear red triangle of Bass on the label.

Registering a trademark in the UK is a straightforward process so long as it fits in with certain rules. The proposed trademark must be an invented word and must not indicate the character or the quality of goods to which it refers. Some such nonsense words have become synonymous with the product, like Kodak, reputedly chosen because it was a nonsense word in every language that could be checked at the time. Another interesting example of this is the tabletop football game known as Subbuteo. When Peter Adolph went to patent the game he wanted it to be called ‘Hobby’, but this was not acceptable under the rules, so being interested in birds he called it Subbuteo instead, which was acceptable. *Falco subbuteo* is the scientific name for the bird of prey with the common name of Hobby.

DORA introduced a series of laws which changed the way we think. No one was allowed to talk about military matters, trespass on railway lines, feed wild animals. The government could take over any property or factory that it
WHERE THE LAW COMES FROM

wanted for the furtherance of the war. There was also the ability to imprison without trial and censor both the spoken and printed word. Some of the rules were quite obviously of limited, or no, value, such as not being able to buy binoculars. Probably the most socially changing of these rules covered two things. The first was a change in the licensing laws for public houses. Until DORA it was possible for a pub to be open from 5.30 in the morning until half past midnight. With DORA beer was of a reduced strength and opening hours were changed from midday to 2.30 p.m. and 6.30 to 9.30 p.m. This was a big change and remained more or less so for the next 50 years. The reason for this change was declared primarily to be so that factory workers, especially munitions workers, were able to work longer hours in safety. The second change which wartime legislation brought about was in May 1916, and received the support of Winston Churchill, probably better known as the resolute leader of the resolute UK in the Second World War, also a veteran of the Boer War in South Africa as a press correspondent: namely, British Summer Time. Some of these legislations have lasted a long time and although many were dropped soon after the end of the First World War, they were modified and reintroduced during the Second World War.

During the twentieth century it became apparent that the relationship between law makers in the form of government, law enforcers and society as a whole had changed, unfortunately. When the general population was threatened by aerial attacks during the two world wars, legislation became protective, quite rightly so, being paternalistic in its intents, even when it was, with hindsight, misguided. What happened after 1950 was that paternalism increased and changed into a desire for social control by government, implementation of all this coming down to the courts.

In 1861 Parliament passed the Locomotion Act, which limited vehicles to a speed of 10 mph (about 16 km/h), which was then reduced to 4 mph in rural areas and 2 mph in towns in 1865. This was on the basis of danger to pedestrians and frightening horses. By 1896 this speed limit was increased to 14 mph and by 1930 most roads outside urban areas had no speed limit. What had been put into the hands of the masses was easy access to a lethal weapon – the car. While this was seen as necessarily controlled, it was death and carnage which introduced a speed limit in 1965 on the fastest of UK roads, the motorways, set at 70 mph, and yet there are no modern cars which cannot comfortably exceed this and many which can go twice as fast and at least one which can exceed the speed limit by a factor of three.
Following on from this, remembering that the tone of legislation was becoming, in a general sense, more controlling, there was the introduction of car seatbelts. This is undoubtedly a good thing for car drivers and their passengers. Seatbelts were in use for at least a decade before the paternalistic legislation in 1982 made front seatbelt wearing compulsory. This came into force on 31 January 1983, coinciding with the introduction of breathalysers for the measurement of alcohol. By 1991 the legislation had been extended in the UK so that rear seat passengers were obliged to wear seatbelts. While this was seen as a good thing, it is not universally so. With compulsory seatbelt wearing two things happened: the first was a reduction in death and injury to car drivers and passengers; the second was an increase in death and injury to non-car users, pedestrians and cyclists. Overall, the number of lives saved among car users was greater than the increase in deaths of non-car users, so the vulnerable lost out to the protected. The same strange attitude prevailed with the introduction of compulsory cycling helmets, which in many instances came with an increase in death and injury and a reduction in the number of cyclists, and where those who had been cyclists and now were not did not replace this exercise with anything else. The reduction in cyclists is supposedly because the helmet laws made it seem that governments were saying cycling is dangerous, without considering that it is extraordinarily rare for a cyclist to sustain head injuries just from falling off a bicycle, but relatively common when hit by a vehicle. So, again, the vulnerable are penalised for the sake of the protected. This is the problem with paternalistic legislation – it can quite easily have undesired affects.

During the twentieth century a change took place which has had repercussions down the years and will probably reform the way in which society views the law, namely implementation of science in legal cases. In many ways this was inevitable and it did, indeed, start much earlier than the twentieth century with attempts to identify individuals objectively; although a subjective assessment of whether you know someone is generally far better, the change came about when powerful scientific tools were discovered. These were primarily chemical analysis, fingerprinting and DNA profiling in all of its forms. What these latter two caused was a rethink of the interaction between individuals and the state, worldwide.

The state and judiciary now have to accept not only that there is science in their courts, but that it is driving the law, rather than merely adding weight to it. This started with the introduction of fingerprinting individuals, but had, at
the end of the twentieth century, changed into something quite different. That is, we now have in many countries a legal obligation for any individual who has been stopped for any arrestable offence to give a DNA sample for analysis. The implications are profound and not widely understood. The difference is that this is no longer paternalistic legislation, but legislation designed to control the population. Sadly, many people think that this could backfire because we assume a benign regime, but should that change there will be information in the hands of government on every individual, of all sorts, which could be used destructively. Much of this will be available via the forensic science service of whichever country is involved.

In the UK, the United Kingdom Criminal Intelligence Database was set up in 1995. In 2001 the Criminal Justice and Police Act legislated that a DNA sample from anyone charged with an offence could be retained, even if they were acquitted. This was followed by creeping legislation so that the Criminal Justice Act 2003 allowed for a DNA sample to be taken on arrest, rather than on being charged. This came into force in April 2004. It also put a storage life on DNA profiles of 100 years, which is strange and illogical since, unless the intention is to change the legislation so that all newborns are DNA profiled, all arrested individuals will be dead before their profiles are disposed of. This begs the question: why keep them for so long? Well, it is probably because families can be associated together this way – all right if the regime is benign, but not if it is not. Currently the UK DNA database is the largest in the world, in part because the 2006 Police and Justice Act stated that DNA can be kept on any individual who is arrested even if they are not charged. In 2007 this was challenged in the European Court of Human Rights and was declared to be illegal, as was the holding of DNA data from those who were charged and then acquitted. This was publicly argued against by politicians who claimed that (1) most offences are caused by re-offenders (remember that they were not charged or acquitted) and (2) the innocent have nothing to fear (if they are innocent there is no reason to hold the DNA in the first place). Your genetic code is yours, it does not belong to anybody else – least of all the state. In 2006 the Identity Cards Act was also enacted, the belief being that everyone in the UK should carry a card with sufficient biometric data on it so that they can be unequivocally identified. That in itself would be difficult, but to expect individuals to pay for it would be stretching political reality rather a long way. There have been identity cards before, most notably during the First World War and then with the National Registration Act of the Second World War,
which ran on for some years after the end of the war until it was finally abandoned in 1952 after criticism in the courts and a deep feeling of resentment by the populace.

This obsession by government to be able not only to identify each individual, but to have a handle on them, stems, in part, from the very earliest techniques of stating individuality – handwriting analysis and Bertillonage. Although fingerprints had been used for a very long time as statements of authenticity, for instance thumbprints were used in ancient China to verify banknotes, strictly speaking promissory notes, this was done with no formal quantification, so it was very difficult, if not impossible, to match two fingerprints to each other. Interestingly, although fingerprints were observed as individual specific, it was a much more cumbersome system which first became used as an objective measure of an individual, which eventually failed through questions of unreliability. This was a system of measurement called Bertillonage. It was introduced in 1882 by Alphonse Bertillon (1853–1914) when he was Chief of the Identification Bureau in Paris. Although it was seen as a good system, it was dogged by having to be carried out by highly trained personnel, which meant that measurements had to be made by the same individual if they were to be comparable. This is reflected in the difference between precision and accuracy, since individuals carrying out the measurements may well have had high precision but low accuracy. This is quite acceptable if it is only one person making measurements of different individuals. In general terms, however, Bertillonage was almost impossible to quantify simply because measuring biological systems is fraught with factors which are impossible to control; if you measure your height first thing in the morning you will be taller than late in the day, for example. Even though Bertillon was from a distinguished family of statisticians, the probability of two individuals sharing the same measurements was unknown and detailed techniques of statistical analysis of this type of data were simply not available at the time. The same is also true of attempts to analyse handwriting. As a technique this was discredited by the infamous Dreyfus case in France where Dreyfus, later exonerated, was accused of treason and found guilty on the basis of handwriting analysis. This disaster of justice was a product of hubris associated with a powerful individual being not just associated with the nascent science of forensic science but seen as an absolute arbiter of interpretation of scientific, and pseudo-scientific, data. See box below.
**R. v. Silverlock [1894] 2 QB 766**

This is an interesting case to look at as it demonstrates the plausibility of the courts when dealing with science which may have a dubious pedigree. This case required the analysis of a handwriting sample. The question asked by the court was not ‘can handwriting be identified by comparison?’, which is the right question, but ‘can the person giving the evidence be regarded as expert from their professional activities, or do they have to be a professional expert?’, which is a complete red herring. In this case the handwriting was identified by a solicitor, having studied old handwritten documents in his spare time. Although the court was intent on deciding whether an expert was expert, it neglected to ask the big question, which was whether information given by an expert was based upon a reliable and sound foundation – was it going to mislead or help the court?

What happened in the Dreyfus case was interesting because it demonstrates the French imperialist attitude to science at the time – it had to agree with the major players in the field. There was very little peer review, just adherence to an accepted view. So, in the Dreyfus case there was a convoluted court case based on what Alphonse Bertillon said was correct – it was not.

Bertillon was a keen advocate of handwriting analysis and gave an opinion on the origin of a handwritten document. He opined that it originated from Alfred Dreyfus, then a captain in the French Army. This was in 1894 and the tested document was a letter which directly implicated the writer in an act of betrayal and resulted in Dreyfus being incarcerated for several years on the testimony of Bertillon. Perhaps even worse, when it became apparent that an error had been made, a cover-up was attempted which resulted in another officer being imprisoned on a trumped-up charge. The story takes an even more bizarre twist with the famous author Emile Zola being sentenced to a year in prison for his now famous open letter to the President of the Republic which began *J'accuse* (I accuse). Zola was lucky in that he managed to avoid incarceration by fleeing to England. With the exoneration of Dreyfus his fortunes changed and he was reinstated in his former rank in the army. His career progressed and although the First World War was not a good time for anyone, Dreyfus was promoted to lieutenant colonel.

This is the problem with many forensic techniques: they are open to rather too much subjective interpretation. Try comparing your own signature written
with a soft pencil on a pad of paper and one written with a fine-point fountain pen on a single sheet of paper balanced on your knee. So where does this leave us with the history of the law? Well, it is relevant because the incorporation of these systems into law has been a mistake, but has been corrected through the passage of time.

An interesting thing about all of this sort of legislation which is trying to identify individuals exactly is that, although most would agree that there have been some spectacular results from the DNA database, with crimes being solved which would otherwise not have been, the one thing not addressed is simply this: with all this technology and legislation the crimes are still being committed in the first place. If that question was addressed it would not be necessary to have this complicated and draconian legislation in the first place, which would save a great deal of money and resentment.