IN BRIEF

- Describes the Hippocratic family values of apprenticeship
- Comments on the unifying moral effect of apprenticeship on the emerging profession of Dentistry
- Compares apprenticeship with the Vocational Training Scheme, and compares Guild guidance with that of the General Dental Council

Ethics; *'In consideration of the love he bears.'* Apprenticeship in the nineteenth century, and the development of professional ethics in dentistry. Part 2. Hippocrates' long shadow

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This two part paper takes a look at the ancient institution of apprenticeship. As stated in the introduction to the first part,¹ it regards the conventions of the scheme as having had a positive influence on the morality, legal identity, and professional allegiance of dentists during the ethical development of their profession in the nineteenth century. The first paper looked at the particular application of apprenticeship through the evidence of indentures in the BDA museum. This second paper enlarges on the view that the wider social institution of apprenticeship was at least in part responsible for the development of the ethics of the dental profession.

This paper argues that the practitioners who seemed at the beginning of the nineteenth century to be so anarchic in ethical and legal terms in fact worked in a cultural environment with an all-pervasive ethical base. If this argument is accepted, even those dentists who had not been, or did not employ, apprentices, could not escape the mores built into the apprenticeship scheme.

It did not matter in the least whether the future dental operator had served under a surgeon, apothecary, chemist, watchmaker, or in any other trade, for the conditions of apprenticeship were universal. Even those who came from abroad throughout the nineteenth century, and the unqualified mass without formal dental training who rushed to register in 1878, and who had, no doubt, their own individual morality, (even if for some of them it was the morality of

the fox who knows where the geese sleep), do not diminish the thesis of the paper, for they too were immersed in the ethos of those who had been apprenticed.

Serving an apprenticeship was perhaps not ideal as a way of entering the respectable side of the dental profession as it grew in the first half of the nineteenth century, but it was the only way of doing so. No other legal social construct existed until the LDS examination of the Royal College of Surgeons in 1860, and alterations to the Medical Acts in 1878 which allowed registration.

Writing in 1651, Thomas Hobbes declared that *'without a common Power to keep them all in awe [men] are in that condition which is called warre, as is of every man, against every man'*. Actual strife he put down to the wish for Gain, Safety, or Reputation. He concluded the next paragraph with the well known passage itemising the breakdown in such a society at war, with; *'no Knowledge ... no Arts; no Letters; no Society; and which is worst of all, continuall feare, ... ; And the life of man, solitary, poore, nasty, brutish, and short.'*²

Christine Hillam's account of dentistry in the early nineteenth century³ is a con-

stant reminder that what Hobbes said of the country without law, is also true of a craft or profession without central authority. Survival of practitioners in the provinces seems very brief. That dentists should seek out security in the old ways of Society, while eagerly seeking out a new authority, either through the surgeons or through the foundation of their own College, is understandable.

As the industrialisation of the country developed apace, the importance of apprenticeship as the key to enter respectable life in the nineteenth century was further enhanced by the readiness of the factories to employ un-apprenticed labour. This created a large working class of unprotected workers, in sharp contrast, for example, to the ordinary medical GP, who, after the Apothecaries Acts of 1815 and 1825,⁴ and before the Medical Acts of the second half of the century, had to serve an apprenticeship as an apothecary. The profound effect of this on the medical profession has been discussed by, amongst others, Sir Zachary Cope, and SWF Holloway.⁵

The status which this gave to apprenticeship can be seen in the writing of George Derby Waite, (1804–1880) the pio-

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Refereed Paper

Received 06.12.01; Accepted 22.04.02

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neer dental reformer, son of the dentist to George IV, and himself from 1843 surgeon-dentist to the Imperial Court in Russia, who had studied surgery under Dupuytren in Paris.⁶ In 1841 in his suggestions for the education of those proposing to enter the profession of dentistry, he said:⁷ *'I would urge that it ought to be imperatively demanded...that he pursue a system of work for three years at least, to gain a steadiness of hand and a thorough knowledge of instruments ... and also have pursued hospital practice ... and his pupils afterwards always apprenticed to and examined by a board of officers'*. This suggestion, that after the necessary grandfathering of the first dentists to be registered, all those following must be apprenticed to a board of officers, is both revolutionary and prescient, for when the dental schools took over from apprenticeships as the producers of dentists, this is in effect what had happened.

Of two of the founding fathers of modern dentistry, it should be noted that at the age of 16, Sir John Tomes FRS (1815–1895) was apprenticed for 5 years to Thomas Furley Smith, an apothecary practising in Evesham.⁸ Unusually, he did not then go on to take his MSA or MRCS, but turned to dentistry, following an intensive course in practical dental mechanics (Cope pp11–15).⁸ In the end he took the MRCS in 1860, under pressure from the College, before becoming an examiner for the newly created LDS. (Cope pp 72/3).⁸ By way of contrast, Sir Edwin Saunders (1814–1901) was a 'true' dentist, having been apprenticed to Mr Lemaile, a dentist in Southwark. He took his MRCS in 1839, and held the post of surgeon dentist to Queen Victoria from 1847–1883.⁹ Tomes said of those who like Saunders had entered the profession through pure dentistry: *'If they were real dentists they were but amateur surgeons. Still it cannot be denied that they more than held their own against those whose surgical education was complete before they thought of dental practice.'* (Cope p.15)⁸

The pervading influence of apprenticeships was not necessarily seen or recorded at the time of their general use. This was not a conscious omission, for the centuries old ethos of apprenticeship was so much part of everyday life that its absence was as inconceivable as its presence was invisible. Equally not noticed in particular was the extension of purely dental apprenticeships as the profession settled down. The profession 'without the law' was quite happy to embrace the rigid rules of the society in which it operated when respectability was attached to apprenticeship.

In this study, the modern dental student who has lived accustomed to almost com-

plete freedom, will probably be astonished at the social control accepted as normal for 4 years or more of a young man's life in the past. Also noteworthy is the continued influence of Christianity in what would appear to be an entirely secular matter, and that this influence appeared if anything to increase over the century.

ALLEGIANCE

Two of the BDA archive apprenticeships were drawn up between relatives. Quite a few of Lilian Lindsay's *Personalities* were trained by relatives, and Christine Hillam gives many more instances in Appendices 4&5 of her thesis. The comparison of such family dynasties with masters and apprentices where there was no family link is appropriate, for what apprenticeship did was to create a surrogate family relationship, which, when successful, led to personal and professional loyalty and allegiance. This was clearly recognised in a document of 1740, which was written by Sir John Barnard, Lord Mayor of London 1737–8, and Master of the Grocer's Company in 1738–9.¹⁰ It makes this familial relationship quite explicit, by concluding with a *Letter from an Uncle to his Nephew, on taking him Apprentice*. Trevelyan also stresses this aspect of the relationship.¹¹

When the time came for apprenticeships to fade, this loyalty and allegiance transferred readily from the individual to the institution. When the founding fathers in Lilian Lindsay's group set up the dental hospitals and university departments of dentistry in the late-nineteenth century they could not but take their apprenticeship ethos with them.

Even when apprenticeships had long ceased in dentistry, recognisable shadows of the ethos continued into the twentieth century, with dental hospitals operating assistant house surgeon schemes and house surgeon appointments each with a personal attachment to a consultant. That this long shadow continues into the twenty first century is shown by the success of the vocational trainee scheme, and the implementation of mentoring arrangements, while the loyalty of alumni to their alma mater is notable.

For those subscribing to the Apprenticeship scheme, the moral requirements were in effect lifelong. Once having fulfilled their indentures, they either became journeymen to their master or another, or set up as masters themselves, and as soon as they in their turn took on apprentices, they were obliged to follow the same rules. This is spelled out in the introduction of the booklet already mentioned¹⁰ which was specially bound and given to each apprentice of a Master of the Haberdasher's Company from 1852 to the end of the Century (Fig. 1); *'Your friends having made it their care to place you with a man of character and ability in his profession, from whom, I hope, you will daily receive the most powerful inducements to the exercise of virtue, by his example – remember, then, in the first place, that all duties are reciprocal; and if you hope to receive favour and indulgence from him, you must first of all endeavour to deserve it by your obliging and ingenious behaviour'*.

Overseeing Apprenticeships were such bodies as the Chamberlains Office in London, where Masters inrolled their Apprentices. The Office issued their own booklet,

Fig. 1 1852. The cover and title page of the booklet given to each Apprentice bound to a Master of the Haberdasher's Company

Fig. 2 1904. *Rules for the Conduct of Life*. The cover and title page of the Booklet issued by the Chamberlain's Office in London, and given to Freemen of the City

nicely bound and gilt-edged, (Fig. 2) entitled: *Some Rules for the Conduct of Life, to which are added A Few Cautions, For the use of such Freemen of London as take apprentices*.¹² The thirty-six rules are overtly based on scripture, sixteen have chapter and verse appended, and of the others several are like the last, in their use of phraseology which assumes complete familiarity with the forms of Christian worship; 'RULE XXXVI – *Have God in all your thoughts: study to know and do His will, and be instant in prayer to Him, through the mediation of our Lord Jesus Christ, for*

the assistance of His Holy Spirit to preserve and direct you.' The modern reader of this, even if a believer, will find the social change over one hundred years to be astonishing, for the above quotation is not from a religious tract, but from the very commercial heart of the richest and most powerful nation on earth at the time. In two copies dated 1904 and 1919, the wording does not change.

In addition to the Chamberlain's Office, consideration needs to be given to the power and influence of the Livery Companies. The Apothecaries of course, but also

others such as the Haberdashers and Mercers with their links with hospitals and schools. By the nineteenth century the name of the Company had ceased to represent the activity of the members, and among the members of the family of one of the authors associated with the Haberdashers are to be found clock-makers, bankers, insurance workers, and a physiotherapist.

Sir John Barnard's booklet mentioned earlier, from which the quotation about the family basis of apprenticeship and the moral position of a Master were taken, reveals the detail of what might be expected of an apprentice beyond his or her indenture document, which was in itself morally binding enough. It is not necessary to claim that each, or even any of the dental apprentices or dental practitioners saw one of these booklets. They serve to illustrate the moral climate in which all apprentices lived. Under the title: *A Present For An Apprentice: Or, A Sure Guide to Gain Both Esteem and Estate: With Rules For His Conduct to His Master and in the World*, the 93 page booklet carries advice with the 50 headings of Table 1.

HIPPOCRATES AND THE MEDICAL FAMILY

Outside apprenticeships, the 'family' aspect of the ethos of dentistry should not be under-estimated. Most, if not all dentists will have been taught at some stage by those who, they will observe, teach for that love of their profession which the disciples of Hippocrates (BC468–377(59)) desired in the introduction to his oath:

'I swear by Apollo the Physician, and Aesculapius and Health, and All-heal, and all the gods and goddesses, that, according

Table 1. Sir John Barnard's booklet bound for The Haberdashers Company in 1852: *A Present For An Apprentice: Or, A Sure Guide to Gain Both Esteem and Estate: With Rules For His Conduct to His Master and in the World*, illustrates the moral climate in which all apprentices lived, under 50 headings

Lying	Value of Time	Dissimulation of Injuries
Dishonesty	Company	Irresolution and Indolence
Connivance	Men of sense	Choice of Opportunities
Fidelity	Sots	Important Affairs to be Managed in Person
Temperance	False Complaisance	Rumours and Tales
Pleasure	Friendship	Letters
Dress	Choice of Friends	Caution in Setting-up
Government of the Tongue	Bonds and Securities	Serve first as Journeyman
Ill-natured Jests	Fellow-Apprentices	Great Rents
Family Secrets	Recreation	Fine Shops
Secrets Reposed in You	Cheap Pleasure	Servants – Familiarity with them
One's own Secrets	Gaming	Taking Apprentices
Expectations	Proper Persons to deal with	Religion
Other People's Quarrels	Fair Professions	Advice to a Young Tradesman
Tale-bearing	Suspicion	
Frugality	Rash Resentment	
Master's Cash	Complacency	
Industry	Temper of Men	

*Signed, Sealed and Delivered
by the within named William
Alexander in the presence of,
Edward Wakefield,
2 Chichester Street
Chester.*

*We the within mentioned William Alexander Mc
Marston Matthews and Robert Richardson do hereby
that the within mentioned Arthur Alexander has of
and adopted and is now known by the name of "Ar
Alexander Matthews".*

Fig. 3 1878. The rider added to the indenture of Arthur Alexander Matthews, showing him taking the name of his Master. LDBDA 06.4. by kind permission of the British Dental Association

to my ability and judgement, I will keep this Oath and this stipulation – to reckon him who taught me this art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and to teach this Art to them, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture and every other mode of the Art to my own sons, and those of my teachers, and to disciples [cf. Apprentices] bound by a stipulation and oath according to the law of medicine, but to none other.’

The parallel seen in the apprentice scheme with the hippocratic stress on teaching for love, and of a closed shop for medicine, is an indication of how deep seated these constructs are in human social affairs. Those who love their profession cannot stop themselves passing on their knowledge to those of the next generation who have committed themselves to the life.

Such men and women put back into the profession something of what they themselves received, enriched by their own experience. Their students will have recognised that tutors of this kind were among the best. If they did not teach the core subject for no fee, as the oath requires, there was plenty that they did convey for which no return was asked other than that their pupils were in turn inspired to care. It is of the very essence of the Vocational Trainee scheme.

T. S. Eliot (1888–1965) had this to say in his social critique *Notes towards the Definition of Culture*, of 1948:

‘The primary channel of transmission of culture is the family: no man wholly escapes from the kind, or wholly surpasses the degree, of culture which he acquired

from his early environment. It would not do to suggest that this can be the only channel of transmission: in a society of any complexity it is supplemented and continued by other conduits of tradition. Even in relatively primitive societies this is so. In more civilised communities of specialised activities, in which not all the sons would follow the occupation of their father, the apprentice (ideally, at least) did not merely serve his master, and did not merely learn from him as one would learn at a technical school – he became assimilated into a way of life which went with that particular trade or craft; and perhaps the lost secret of the craft is this, that not merely a skill but an entire way of life was transmitted.’¹³

A dramatic example of the family ethos in dentistry exists in the indenture of 1876

This Indenture

WITNESSETH That *Jeremiah Jones* of his own free will and Accord, with the Consent of *Amedée Boursin* of *Tralee* County of *Clonmel* St. *Tralee* to learn *his* Art, and with *his* (after the manner of an Apprentice,) to dwell and serve, from the *first* day of *February* 1874 until the full End and Term of *one year*

free, there next following, to be fully completed and ended; during which Term the said Apprentice *his* said *Master* faithfully shall *teach* *him* Secrets keep *his* lawful Commands every where gladly do, *he* shall do no damage to *his* said *Master* nor see it to be done of others, but that *he* to *his* *Master* shall let or forthwith give warning to, *he* said *Master* of the same *he* shall not waste the goods of *his* said *Master*, nor give or lend them unlawfully to any *he* shall not commit Fornication, nor contract Marriage with the said Term. Hurt to *his* said *Master* shall not do or cause or procure to be done by others *he* shall not play at Cards, Dice, Tables, or any other unlawful Games, whereby *he* said *Master* to any have Loss with *his* own or others' Goods during said Term. Without license of *his* said *Master* *he* shall neither buy nor sell, *he* shall not haunt or use Taverns, Ale-houses, or Play-houses, nor absent himself from *his* said *Master's* Service Day *and* Night unlawfully, but in all things, as an honest and faithful Apprentice, *he* shall behave himself towards *his* said *Master* and all his, during the said Term. And the said *Amedée Boursin* said Apprentice in the same Art which *he* saith, by the best way and means that *he* saith, shall teach and instruct, or cause to be taught and instructed, with due Correction; finding unto *his* said Apprentice *and* the said *Amedée Boursin* shall pay the said Apprentice *Two Shillings* per week for the second year of said Term *Two Shillings* per week during the third year of said Term *and* *Two Shillings* per week during the fourth year of said Term befitting such an Apprentice during the said Term, according to the custom of the

And for the due performance of all and every the said Covenants and Agreements either of the said Parties bindeth *him* unto the other by these Presents. IN WITNESS whereof the Parties above-named to them INDENTURES have interposedly put their Hands and Seals the *first* day of *February* in the Year of our Lord One Thousand *Eight Hundred* and *Seventy*

Signed, Sealed, and Delivered in the Presence of *James Andrew & Sons*

Fig. 4 1904. The Indenture of Jeremiah Jones to the Limited Company of Amedée Boursin of Tralee. LDBDA 06.11 by kind permission of the British Dental Association

by which Arthur Alexander was apprenticed for 5 years and 7 months to Alfred Matthews, Surgeon Dentist.¹⁴ Two years after starting, on the 19th of November, 1878, he added to his name that of his master, and a rider was added to the indenture; (Fig. 3). 'We the within mentioned William Alexander, Alfred Marston Matthews, and Robert Richardson, do hereby certify that the within mentioned Arthur Alexander has assumed and adopted and is now known by the name of "Arthur Alexander Matthews".' The explanation may be prosaic, but one would like to think not.

IDENTITY

Apprenticeship was the normal route into all trades and professions, and for some was compulsory, as was the case for the apothecaries following the Apothecaries Acts. A previous paper published in the Journal has demonstrated that the tooth-drawers and other providers of dental treatment were not necessarily legally attached to the surgeons.¹⁵ No legal compulsion existed to make them apprentice themselves to a surgeon or dentist to learn their craft.

There were in any case still very few pure dentists in existence in the first years of the nineteenth century, and others of the illustrious 'founding fathers' of the profession than Waite and Tomes served as apprentices in other disciplines. Steadily though, as more true dentists became established and successful, they became respectable enough and prosperous enough to be approached by parents and guardians seeking to apprentice their sons to them.

This became self-perpetuating and the resulting sense of the group identity of dentists established itself with rapidity, although it did not become an exclusively legal identity until 1921, and was far enough advanced by 1878 to allow for a concerted attempt to make it so by an Act of Parliament in that year. This failed through poor drafting of the Act, rather than any lack of will, or conception of identity. Dentists knew who they were, and had become very concerned to exclude pretenders.

THE TWENTIETH CENTURY LEGACY

The tail end of dental apprenticeships extended into the twentieth century. That of Leslie James Godden, the 'infant of 18 years' who was apprenticed to Cecil Hastings Bradnam in 1915 in mechanical dentistry, has already been mentioned. Another

of particular interest is that of Jeremiah Jones, who was apprenticed to Amedée Boursin Surgeon Dentists Limited, of Nelson Street, Tralee in 1904 (Fig. 4).¹⁶ It would be interesting to know how many other dental surgeon companies took on corporate apprentices in this way, and how many such limited companies there were.

Since these two twentieth century BDA apprenticeship documents, two World Wars, which accelerated the emancipation of women, and other political, educational, and social changes, have modified the historical base to the point that the imposition of strict mores previously thought normal, on apprentices bound to serve day and night, is inconceivable today.

Apprenticeship seemed a thing of the forgotten past, and for a relatively brief period in the last century, the dental training which was carried out within the dental schools over a 5-year course, when the student was aged eighteen to twenty-three, was judged to be sufficient to produce a dentist, and the newly qualified licentiate or graduate was reckoned fully prepared for practice.

This is not the case now, and the old idea ended for those wishing to enter into the NHS scheme when a compulsory Vocational Training year was imposed in the 1980s. The comparison of this VT year with apprenticeship need not be stressed in its detail, since those who have enjoyed the scheme will note for themselves the ethical parallels, and moral differences.

There is no doubting though that the apprenticeship concept is a robust social construct. Certainly the personal experience of one of the authors of working alongside three vocational trainers and their many trainees, and with two area co-ordinators, has shown them to be enthusiastic and conscientious, thoroughly worthy hippocratic exemplars of the neo-apprentice scheme. Apprenticeship has not been extinguished, merely remodelled.

The place of the Livery Companies and the Chamberlain's Office with their moral and ethical precepts for apprentices and their Masters, has been more than filled for the qualified dentist by the General Dental Council, with its *Maintaining Standards; Guidance to the Dental Team on Professional and Personal Conduct*.¹⁷

What the two papers have delineated is the ethico-social environment in which the profession of dentistry 'grew up', and it is an environment in which apprenticeship

was a significant factor at the start, was still influential at the end of that growing period, and has left its trace to this day.

The Authors are much indebted to: Roxanne Fea, Archivist of the BDA, for access to the apprentice material; Jessica Newton, Archivist to the Corporation of London Records Office, for information; and to Christopher Liddle, late of the Law Society, for legal documents and valuable comment.

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