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## The Appliance of 'Science' or the Expression of an 'Art': Coaching Texts in the 'Long Victorian' Period.

Modern sports forms emerged in Britain during the 'long-Victorian' period, the years from the 1789 French revolution to the outbreak of World War One in 1914, when the number of instructional manuals expanded as coaches increasingly recorded their advice in print. While the majority of early texts dealt with pugilism, by the first decade of the twentieth century the demand was such that publishers were producing series, such as *Spalding's Athletic Library* and the *All-England Series*, to service an increasing number of participants looking for advice on activities ranging from tennis and swimming to dancing, athletics, sailing and rowing. This paper considers several texts to explore the preoccupations of their authors and I am going to highlight four themes. Firstly, most instructional manuals recognised that a coach or trainer/mentor was an invaluable aid to performance. Secondly, professional coaches argued that coaching expertise was dependant on experience and, thirdly, the coaching process was rarely touched on, and then only by amateur authors. Lastly, these texts remind us that sports coaching cannot be considered independently from its context. When amateurism became the dominant creed for late nineteenth-century middle-class athletes this was reflected in the content of instructional texts with each writer presenting his work according to his own personal sporting philosophy. Historian E.H. Carr noted that publications will always reflect the predilections of authors and that a reader's first concern should be with identifying the author and the 'bees in the bonnet'. He advised consumers of texts to 'always listen out for the buzzing',<sup>1</sup> an important consideration when deconstructing instructional manuals, especially those written by amateurs.

### The Sources

The production of instructional texts had become a well-established practice by the eighteenth century, as reflected in general behavioural texts and detailed advice on leisure activities ranging from angling and archery to hunting, horse racing, cock fighting and fencing.<sup>2</sup> In 1713, wrestling was covered by Parkyns, who considered technique, fitness, diet, and athlete recruitment. For him, wrestling was both an art and a science, terms relating to skill and technique that became interchangeable in many later boxing texts.<sup>3</sup> These identified the elements of competitive performance, assessed the relative value of each, gave technical advice, and analysed the characteristics of renowned fighters. Boxing authors clearly distinguished between the acquisition of technique, 'science' or 'art', and 'wind', or fitness, and Mendoza claimed in 1816 that 'pugilism has been wrought into a regular system and elevated to the rank of a science'.<sup>4</sup> Sinclair recorded the oral traditions and practices of trainers across all sports in his 1807 *Code of Health and Longevity* and, as coaches became even more central to sporting activities, the numbers of instructional manuals increased. In 1852, sculler Robert Coombes published notes on rowing and training,<sup>5</sup> and pedestrian John Levett wrote articles on training in the 1860s. Much of the technical content still has credibility. Craven discussed repetition training in 1855 and Walter George, who had been experimenting with fartlek training since the 1870s, was advocating short runs for speed, longer runs for stamina, and the need for regular recorded time trials by 1902.<sup>6</sup> In 1902, Bredin advocated daily

<sup>1</sup> Carr, E. H. (1990) *What is History?*

<sup>2</sup> A Gentleman, *The Gentleman's Library, Containing Rules for Conduct in all Parts of Life*; Darrell, *A Gentleman Instructed in the Conduct of a Virtuous and Happy Life*; MacArthur, *The Army and Navy Gentleman's Companion*; Cole, *The Soldier's Pocket-Companion*; Godfrey, *A Treatise upon the Useful Science of Defence*. 1747.

<sup>3</sup> Parkyns, *The Inn-Play: or, Cornish-Hugg Wrestler*, 9-18 and 37 and 59.

<sup>4</sup> Mendoza, *The Modern Art of Boxing*, 28-31; 'An Amateur', *The Art of Manual Defence*, 68-91; Mendoza, *Memoirs of the Life of Daniel Mendoza*, xvi.

<sup>5</sup> Member of C.U.B.C. (Possibly J. F. Bateman), *Aquatic Notes, or Sketches of the Rise and Progress of Rowing at Cambridge, With a Letter Containing Hints on Rowing and Training by Robert Coombes, Champion Sculler*, J. Deighton, Cambridge, and G. Bell, London, 1852, 101-107.

<sup>6</sup> 'Craven', ed., *Walker's Manly Exercises*, 9th edn., Revised by 'Craven', Bohn, London, 1855; Hadgraft, R., *Beer and Brine: The Making of Walter George, Athletics' First Superstar*, Desert Island Books, Westcliff-on-Sea, 2006, 29; George, W., *Athletics and Kindred Sport*, Southwood, Smith and Co., London, 1902.

interval training and year round conditioning, while Downer was using punch balls in his sprint training.<sup>7</sup> In 1903, Holbein advised swimmers to ‘take it out’ of themselves whilst training and then slacken off when they felt ‘fit’ before having a day or two ‘standing easy’ before the big event.<sup>8</sup> In 1910, swimming coach Jabez Wolffe advised that strict training should begin twelve weeks before competition, starting with short distances and working up gradually to a little over the full course, swum at the same pace throughout.<sup>9</sup> By this point, several instructional texts covering a wide range of sports and leisure activities, written mainly by amateurs, were being published at the same time as professional coaches were producing their own training manuals.

### The Coach

The need for an experienced mentor was emphasised throughout instructional texts, including those written by amateurs. In 1889, Wilberforce observed that there were so few professionals in lawn tennis that there was little teaching expertise available leading to the game being ‘picked up at haphazard’ and resulting in habits being formed, which would be difficult to eradicate.<sup>10</sup> Scott advised aspiring dancers in 1911 to take lessons from a master who would teach them ‘scientifically’, and he defined four grades of dancing teachers at the top of which were those who taught according to the ‘recognized canons of the art’ followed by teachers who simply taught what is done rather than what should be done. The third level taught only their own often peculiar ideas, which were not based on ‘conventional rules, scientific requirements, artistic propriety or even fashion’ and lastly there were those who had picked up dancing knowledge in places of amusement.<sup>11</sup> Jenkin, writing in 1896, thought having a good gymnastics instructor made it comparatively easy to acquire a correct style, while cyclists were advised that there was ‘nothing more beneficial to the beginner than the care and treatment which a competent trainer can bestow’.<sup>12</sup> Unsurprisingly, professional texts were even more positive about the influence of the coach. Downer’s 1900 work lauded two of his coaches, ‘Jimmy’ Duckworth, who had a ‘knack’ of talking to Downer that made it ‘impossible for me to get beaten’, and Bill Bottomley, a ‘most conscientious trainer’, very ‘quick to discover a man’s weaknesses’ and a great ‘judge of character’.<sup>13</sup> For Walter George, writing in 1902, the superiority of American track and field athletes in technical events, ‘in which science plays a big part’, was mainly due to the fact that they had expert coaches.<sup>14</sup> Shrubbs advised readers in 1908 to engage the most experienced trainer they could find and to accept his advice in every detail. No-one could stay at his best for any length of time, and the trainer’s duty was to ensure his man did not get ‘ahead too fast’ by employing scientific training methods. This was the role that Harry Andrews, ‘the only trainer I have ever had, and one who, in my opinion, seeks his equal in that capacity’,<sup>15</sup> had played for Shrubbs. In 1910, Wolffe acknowledged the contribution of his coach, Walter Brickett, who had ‘always understood me thoroughly and who has developed my powers in a truly remarkable fashion’. All athletes had their own personal peculiarities, and, since he had had a long and highly successful coaching career, Brickett had developed his observational skills to the point where he was able to ‘come to a rapid and accurate decision’ on any aspect of training or technique.<sup>16</sup>

<sup>7</sup> Bredin, E.C., *Running and Training*, The Author, Northampton, 1902; Downer, A.R., *Running Recollections and How to Train*, Gale & Polden Ltd., London, 1902, 55.

<sup>8</sup> Montague Holbein. *Swimming*. London: C. Arthur Pearson Ltd. 1903, 113.

<sup>9</sup> Wolffe, J., *The Text-Book of Swimming*, Ewart, Seymour and Co., London, 1910, 52-59.

<sup>10</sup> H.W.W. Wilberforce. *The All-England Lawn Series. Lawn Tennis* 1889 London: George Bell and Sons, 23.

<sup>11</sup> Edward Scott. *The All-England Series. Dancing*. London: G. Bell and Sons Ltd. 1911, 12-13, 17.

<sup>12</sup> A.F. Jenkin. *The All-England Series. Gymnastics*. London. George Bell and Sons. 1896, 5; Right Hon. The Earl of Albemarle and G. Lacy Hillier *Cycling* Longmans, Green, and Co. London and Bombay 1896, 178, 181-182.

<sup>13</sup> A.R. Downer. *Running Recollections and How to Train*. London: Gale and Polden Ltd. 1900, 98, 101.

<sup>14</sup> W. G. George. *Training for Athletics and Kindred Sports*. London: The Universal-Press Agency, 1902, 76, 80.

<sup>15</sup> Alfred Shrubbs *Running and Cross-Country Running* 1908. Preface, Chapter 1 and Chapter III. Available at <http://web.archive.org/web/20070206150544/http://www.alfieshrubb.ca:80/index.php/book/>

<sup>16</sup> Wolffe, J. (1910). *The Text-Book of Swimming*. Ewart, Seymour & Co.: London, 58-59.

### Coaching Experience

The importance of experience was always referred to in instructional texts, both as participant and mentor. As Knight pointed out in his 1889 *Sailing* text, 'It is only after considerable experience that the sailor is able to do the right thing promptly in the various emergencies which he is sure to encounter'.<sup>17</sup> In contrast to later amateur authors, professional writers consistently described themselves as practical men, reinforcing the tension that existed between empirical scientific knowledge and tacit craft knowledge. Swimming teacher Frost emphasised that his 1816 *Scientific Swimming* work was not the product of a 'speculative theory', but the result of long and successful practice over many years.<sup>18</sup> In 1908, Shrubbs acknowledged that his methods may not be the best, but he presented conclusions drawn from his own experiences. Various systems had been recommended by other famous athletes, but he pointed out that he had been particularly successful and that his opinions were reinforced by the fact that his ideas seemed 'to coincide entirely with those of Harry Andrews'.<sup>19</sup> For Andrews, who coached several leading athletes, swimmers and cyclists towards the end of the period and who later acted as trainer to the British Olympic team, advice on coaching practice was unnecessary since training should be supervised by a professional. His 1903 training text argued that amateur athletes who wrote manuals might have undergone training, but they overlooked many 'little practical points' since the trainer had always attended to these for them. Andrews agreed he was not, nor did he pretend to be, an educated man and that his text was the result of practical experience but, if he ran 'counter to theories put forward by more learned people my excuse is that I judge from results I have seen and tested without having gone deeply into the why and the wherefore'.<sup>20</sup> Coaching practice was an art, not a science that could be replicated by anyone, even elite athletes.

### Coaching Process

The pugilist texts of the late eighteenth and early nineteenth century gave advice on technique, diet and exercise, competitive preparation, and psychology, but there was no attempt to suggest how coaches might improve their coaching.<sup>21</sup> Early nineteenth-century swimming texts, such as those by Frost in 1816 and Stevens in the 1840s, concentrated on how to swim not on how to teach or coach. In reproducing the knowledge they had gained through long and extensive engagement with the activity, no professional felt it necessary to give advice on how to coach since they assumed that the ability to coach came directly from experience, from a 'know how' acquired through immersion in the activity. Where the coaching process was touched on by authors it only appears in texts produced by coaches who were not paid for their services such as rowing coach Walter Woodgate. For him, the science of 'coaching' was 'more fully known and more readily comprehended' by the late nineteenth century and, when 'divested of the humbug and bewildering technicalities with which it had been needlessly surrounded', it was a relatively simple task.<sup>22</sup> In *The All-England Series. Rowing and Sculling* in 1892, he advised coaches to keep their temper and to remember the best coach is not necessarily he who knows most and has the most practical experience but the one who is able to impart his knowledge to others, so coaches needed to be lucid, avoid generalities, and be able to demonstrate practically. Faults should be traced to their origins, and coaches must distinguish between cause and effect. Athletes should be monitored and kept informed of their progress while the coach should observe practice from different positions, since 'variations in perspectives throws light on faults and their causes'. While there should be only one coach in authority it was useful to consult with others since a coach could be 'apt to run too much in one groove, to let certain points

<sup>17</sup> E.F. Knight. *The All-England Series. Sailing*. London: George Bell and Sons. 1889, 1.

<sup>18</sup> Frost, J., *Scientific Swimming*, London 1816.

<sup>19</sup> Alfred Shrubbs *Running and Cross-Country Running* 1908. Preface, Chapter 1 and Chapter III. Available at <http://web.archive.org/web/20070206150544/http://www.alfieshrubb.ca:80/index.php/book/>

<sup>20</sup> Andrews, Harry. *Training* (London: C. Arthur Pearson Ltd, 1903), ix-x.

<sup>21</sup> Day, Dave. 'Science', 'Wind' and 'Bottom': Eighteenth Century Boxing Manuals. *International Journal for the History of Sport*, 29(10), (2012): 1446-1465.

<sup>22</sup> E.J. Giannini. *How to Row*. Spalding's Athletic Library, New York: American Sports Publishing Co., 1901, 4.

escape his observation, to lay so much stress upon some crying fault that he blinds himself to some minor evil'.<sup>23</sup> Amateur authored swimming texts argued that it was the ability to impart knowledge in an easily intelligible and attractive manner, coupled with love for the work, and a desire to gain the confidence of pupils, which brought results. Swimmers seeking to be appointed as teachers must be able not merely to *do* but to *teach*.<sup>24</sup> The need for good communication skills was emphasised by Scott, who observed that a dancing teacher must, 'be able to give a satisfactory reason and explanation for everything he does'. Sometimes, their systems were empirical rather than scientific and while this may work with some it will not work for everyone.<sup>25</sup>

### Sporting Contexts

Coaching never takes place in a vacuum and the social, political and moral environment dictates how coaching is valued and utilised. In the latter stages of the 'long Victorian' period, the middle-class sportsman rejected traditional modes of preparation, preferring instead to rely on the protestant work ethic and regular habits, temperance and self-control to develop an ideal sporting body that was situated within clearly defined parameters, described at the time as the 'University' athlete. This had implications for the sports they chose, the way in which they played them, and their instructional texts, which combined an amateur ideology with emerging scientific knowledge.<sup>26</sup> Rowing coach Rudolf Lehmann declared that rowing ought to be controlled only by those who pursue it for pleasure and not by those who make money out of it,<sup>27</sup> and central to the amateur strategy was to attack professional coaches and their training methods. One author in 1885, declared that the amateur had 'struck out a line of his own' in preparing for athletic events, recognising that there could be no benefit to subjecting himself to the 'sort of discipline prescribed for racehorses, fighting cocks or fighting men'. Professional training rules were 'Draconian' and it was evident that this training code (the 'English code') would never do for the amateur, so the 'trammels of ancient dogmatism' were gradually disregarded.<sup>28</sup> An 1896 amateur cycling text described professional trainers as ignorant and illiterate, working by rule of thumb without any accurate knowledge, guide, or intelligence. Their training lore was the result of experience, largely diluted with ignorance and absurdity, and the professional athlete they worked with was often a very vulgar creature. Traditional training systems were wholly inapplicable when the subject was no longer a mere animal, but an intelligent and well-educated man like the amateur athlete. Amateurs had begun to exercise their own common sense and a new style of training had evolved. The contemporary racing cyclist should get the assistance of a modern adviser who worked upon reasonable and rational lines.<sup>29</sup> Amateurs regarded traditional 'professors of swimming' as exuding an aura of secrecy and relying on cliché's and folklore, and one 1893 swimming text, criticised them for having made little attempt to establish a proper scientific basis for the teaching of swimming. Paid 'professors' had their own notions or theories and no two men adopted similar methods or taught movements in the same way. In order to make the swimming teaching systematic, a code of fixed principles should be established and, since professionals were motivated by self-interest, this should be undertaken by 'those who had no pecuniary interest in the sport'.<sup>30</sup>

### Conclusion

As in other social processes, the coaching of sports performers reflected a slow and gradual change with constant referencing both to the past and to developing knowledge. These tensions can be seen in comparing

<sup>23</sup> W.B. Woodgate. *The All-England Series. Rowing and Sculling* (London: George Bell and Sons. 1892), 4-6.

<sup>24</sup> Sinclair, A. (1906) *Swimming and Life Saving Health and Strength*, London. Chapter II. The Teaching of Swimming; Sinclair, A. and Henry, W. (1893). *Swimming*. London, Longmans, Green and Co., 28-30.

<sup>25</sup> Edward Scott. *The All-England Series. Dancing*. London: G. Bell and Sons Ltd. 1911, 17.

<sup>26</sup> Hoole, H. (M.D.), *The Science and Art of Training; A Handbook for Athletes*, Trübner and Co., London, 1888, 2-4, 18, 85-86.

<sup>27</sup> R.C. Lehmann. *The Complete Oarsman*. Philadelphia: George W. Jacobs & Co. 1908, 10. Chapter II. The Emancipation of the Amateur, 17.

<sup>28</sup> Amateur Training. *Baily's Monthly Magazine of Sports and Pastimes*, July 1, 1885, 249.

<sup>29</sup> Right Hon. The Earl of Albemarle and G. Lacy Hillier *Cycling* Longmans, Green, and Co. London and Bombay 1896, 172-176.

<sup>30</sup> Sinclair, A. and Henry, W. (1893). *Swimming*. London, Longmans, Green and Co., 28-30.

the manuals produced by amateurs and professionals. Nevertheless, even when training programmes became more refined in the late nineteenth century, under the influence of a middle class that emphasised moderation, coaching and training manuals continued to address the key essentials of diet, exercise, psychology and technique as chronicled within eighteenth-century boxing manuals. What deconstructing these coaching texts reminds us, however, is that we always need to recognise the voice behind what we are reading. No text is neutral in that it reflects the biases, prejudices and philosophical perspective of the author. That applies just as much to the theoretical texts on coaching that are being published in greater numbers today as it does to traditional instructional manuals.