

Professionalism, Golf Coaching and a Master of Science Degree

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ABSTRACT

A distinction can be made between 'professionalisation', which is concerned with occupational status and standing, and 'professionalism,' which refers to matters of quality and standards of practice (especially specialized knowledge, ethics and altruism). The purpose of this stimulus article is to present key features of contemporary medical professionalism as a basis for critically reflecting on discourse associated with Tiger Woods' current coach, Sean Foley. It is suggested that that provision of a Master of Science degree in golf teaching/coaching would facilitate the development of 'professionalism' in golf coaches.

Key words: Altruism, Coach Education, Ethics, Evidence-Based Medicine, Golf Instruction, Professional Golfers' Association, Reflective Practice, Scholarship, Scientism, Self-Awareness, Specialized Knowledge, Spirituality, Trust, Values

INTRODUCTION

The Professional Golfers' Association (PGA) of America, which is the world's largest working sports organisation with currently 27,000 members, was formed in 1916 [1]. The mission of The PGA of America is to promote the employment and involvement of the game of golf and to contribute to its growth by providing services to golf professionals, consumers and the golf industry [2]. A Code of Ethics was added to the Constitution in 1931, and in 1933 membership required a three-year apprenticeship. Membership rose from 1548 in 1926, to 2236 in 1946. The Teaching Committee issued "A Teacher's Guide" in 1950. The tournament players formed their own organisation in 1968. In 1970 the PGA of America apprentice program was established. In 1975, the first Professional Golf Management (PGM) School was established at Ferris State University in Michigan. In 1986 membership of the PGA reached 9411, in addition to 5111 apprentices. In 1991 Penn State University became the fourth PGM School. Membership of the PGA reached 23,000 in 1993. In 1994, the Golf Professional Training Program (GPTP) was the first major renovation of PGA education and training since 1970. In 2008 the PGA unveiled its new logo (the first since 1990) and brand strategy – "The Experts in the Game and Business of Golf". In the same year, the University of Maryland Eastern Shore became the twentieth and first historically black college/university to join the PGM program. [1] In 2012 the PGA launched Golf 2.0., endorsed by Jack Nicklaus, at the 59th PGA Merchandise Show [2]. The three prime

strategies of Golf 2.0 are: “retain and strengthen the core of current golfers, engage lapsed golfers who no longer play, and drive new players to the game” [3]¹. The PGA’s Annual Report, 2011 stated:

As Golf 2.0 moves forward in the years ahead, the evolution of PGA Education will continue to mirror updated requirements. For example in 2012, Player Development will become one of four areas of certification, joining General Management, Golf Operations and Instruction. The PGA already has modified and renamed the PGA Professional Golf Management to PGM 2.0. The Certified Professional Program is now CPP 2.0, and the PGA Master Professional Program is MPP 2.0. The PGA Golf Management University curriculum, which is being pursued by some 2,600 students at 20 sanctioned universities across the nation, is also addressing the goals of Golf 2.0. [3, p. 9-10]

The PGA of America is a member of the PGA World Alliance, which was born from the World PGA Conference which started in 2004 before a first formal meeting at the third such conference in 2010. The PGA World Alliance, which represents more than 56,000 PGA Professionals and more than 22,000 PGA-member golf facilities is “dedicated to the betterment of the Profession, the Game and the Business of Golf Worldwide” [7].

The United States Golf Teaching Federation (USGTF) was established in 1989 and has 25,000 members in 42 countries [8]. There is an Amateur Division of the USGTF, the National Golf Teachers Federation in which members “retain their amateur status by not accepting monetary compensation for lessons or tournament play” [9]. The World Golf Teachers Federation (WGTF) was established in 1993 and it claims to be “the first and only worldwide membership entity of golf teaching professionals that adapted a standardized method of certification to cross boundaries amongst all golfing nations” [10]. The USGTF has four Golf Teaching Professional Certification Levels. The first two Levels are achieved by online study, but the third Level – to become a Certified Golf Teaching Professional® is achieved through a five-day, on-site course which includes a Playing Ability Test. (“It is not necessary to attain Levels I and II prior to Level III Full Certification.”) The fourth level is USGTF Master Teaching Professional® and this can be achieved through a three-day, on-site course by someone who is a “fully certified member in good standing for a minimum of one year”. [11]. The USGTF has a Code of Ethics [12]. The World Golf Coaches Alliance (WGCA) is the official coach division of the USGTF and the term Certified Professional Golf Coach® is a United States federal registered trademark. A golf coach is defined by the WGCA as “an individual who helps those who compete at golf whether individually or in a team” whereas a golf teacher is “an individual who instructs others how to play the game of golf” [13].

The USGTF has been marketed as an alternative to the PGA and in this regard there is a large amount of discourse on blog sites on issues related to professionalisation such as monopoly, length of certification process, and licensing. Evetts defines ‘professionalisation’

¹ “Sub-sets of Golf 2.0 include programs such as Get Golf Ready, Connecting with Her for women, PGA Junior League Golf, an alliance with the Boys and Girls Clubs of America, and many other platforms designed to enlist future generations of golfers. ... for 2013, the PGA of America has allocated \$12 million for Golf 2.0 and Growth of the Game initiatives” [4] According to the National Golf Foundation, the number of players in the USA who played at least one round of golf peaked at 30 million in 2005, but fell to 25.7 million in 2011 [5]. The goal of Golf 2.0 is to increase the number of golfers in the USA to 40 million by 2020 [6].

as “the series of diverse and variable, social and historical, processes of development, of how work sometimes becomes an occupation...and how some occupations achieve various forms of occupational control of work” [14, p. 120]. Evetts compares Anglo-American to continental European models / perceptions of professionalisation:

In both the UK and USA...the professional associations have commonly acted as highly visible advocates for and defenders of the professional interests of their members in their negotiations both with states in respect of exclusionary licensing arrangements and with universities in respect of accreditation procedures. ... In Europe, state bureaucracies have operated the licensing and accreditation procedures resulting in closer connections between states and professions in professionalisation processes. [14, p. 121]

The USGTF has had legal wrangles with the PGA Tour over trademarking of the World Golf Association [15]. The German Golf Teaching Federation (GGTF) took the German PGA to court and won a ruling in order to gain acceptance with the German Golf Federation for training the German public for their “green card” to play golf on both public and private courses [16]. In a similar “restrictive trade practice lawsuit” in Holland, the Dutch Golf Teachers Federation won a court victory over NGF Holland [17].

From the perspective of the PGA of America, the emergence of the USGTF could possibly be seen in terms of ‘deprofessionalisation’; i.e., “the process by which highly educated and skilled professionals are first displaced then replaced with individuals of inferior training and compensation” [18]. At the crux of the matter is the length of training/certification process, which is much shorter in the USGTF, and the standard of the ‘playing ability test’, which is less rigorous in the USGTF [19, 20]. However, there is also the issue of specialisation. The education and training of PGA professionals is essentially geared towards being a golf professional of a ‘generalist’ nature. The USGTF is dedicated exclusively to golf teaching/coaching.

For a comprehensive article on matters of professionalisation and professionalism from the perspective of the PGA of Great Britain and Ireland, including volunteer amateur coaches, see Phillpots [21]. Other PGAs who have recently made major developments in coach education include the PGA of New Zealand, who, along with New Zealand Golf, Inc. and [what is now] Sport New Zealand “identified the need for a dedicated golf coach development pathway, where a person can register for a training programme and enter into an introductory programme of golf coach training...and be trained to whatever level they aspire, all the way to a high performance golf coach, either paid or unpaid” [22].

PROFESSIONALISM VERSUS PROFESSIONALISATION

The following definition of ‘profession’ by Professions Australia in 1997 emphasizes ethics, altruism, and special[ized] knowledge:

A profession is a disciplined group of individuals who adhere to ethical standards and who hold themselves out as, and are accepted by the public as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and who are prepared to apply this knowledge and exercise these skills in the interest of others. ... [23, cited in 24, p. 4-5]

Beaton [24] defined professionalism as “a combination of knowledge, skills, trustworthiness and altruism found in those who commit themselves to a life of service to others” and it “now covers many more disciplines than the original professions of law, medicine and divinity” [24, p. 2]. Noddings [25] distinguished between “professionalism” – “a person or group’s adherence to a set of high standards internal to the practice under consideration” and “professionalization” – “the status characteristics of an occupation”. The former refers to “a highly skilful and ethically admirable way of performing an occupation”, while the latter refers to “control over selection and regulation of members, privilege and status hierarchies, collegiality and autonomy” [25, p. 246-247]. For Noddings occupations such as teaching and nursing, which struggle for full professional status, should focus rather on “the complexity, uniqueness and integrity of their activities” [25, p. 247]; i.e., professionalism rather than professionalisation. In making a similar distinction to Noddings, Hargreaves [26] notes that stronger professionalization (“improving status and standing”) does not necessarily mean greater professionalism (“improving quality and standards of practice”):

...defining professional standards in high-status, scientific and technical ways as standards of knowledge and skill, can downgrade, neglect or crowd out the equally important emotional dimensions of teachers’ work in terms of being passionate about teaching, caring for students’ learning and lives. [26, p. 152]

MEDICAL PROFESSIONALISM: ETHICS, ALTRUISM AND SPECIALIZED KNOWLEDGE

Furlong [27] makes a link between uncertainty, specialized knowledge, autonomy, judgment, responsibility and values:

It is because professionals face complex and unpredictable situations that they need a specialized body of knowledge; if they are to apply that knowledge, it is argued that they need the autonomy to make their own judgments; and given that they have that autonomy, it is essential that they act with responsibility – collectively they need to develop appropriate professional values. [27, p. 18-19, cited in 28]

Of importance to the ethical and altruistic nature of professionalism is the imbalance in power between the professional and the client, due in part to the “asymmetry of specialized knowledge” [24, p. 9; p. 16], such that the request for professional autonomy needs to be “compensated by public trust based on the rigorous use of an ethical code” [28] so that the professional serves the best interests of the client. It is the “tacit expectation of ethics and altruism” that leads to professionals being trusted by their clients and society [24, p. 21].

While altruism can be defined in terms of unselfishness, according to the Royal College of Physicians’ (RCP) working party on medical professionalism, it should not be about “sacrificing oneself entirely for one’s profession, at least in terms of enduring poor working conditions or withered family life” [29, p. 2]. The RCP working party also recognised that good medical practice requires both altruism and humility [29, p. 19-20].

Medical knowledge has been transformed by the combination of evidence-based medicine and the IT revolution such that anyone can access evidence to use for their own ends [29, p. 1-2; 30, p. 5]. This is associated with “a greater willingness to question doctors” [30, p. 6]. On the question of whether professionalism will survive the information age, and the limits of internet-gained knowledge, Beaton [24] argues that the asymmetry of specialized knowledge is due to a division of labour such that “[t]hose who have had intensive training

and then work full-time as a specialty can hardly fail to know more about that work than others” [24, p. 19]. This transformation of medical knowledge is one of the reasons for the decline of paternalism; the moral principle of ‘a concern for what experts believe is good for people, irrespective of what those people want or think’ has been replaced by two principles (associated with two distinct senses of consumerism²): ‘a concern for what people want, irrespective of whether or not it is good for them’ and ‘an insistence that what is good for someone cannot be defined without the participation (in so far as possible) of that person [30, p. 6]. With regard to the latter principle; i.e., ‘no decision about me without me’:

Take a hip replacement. Someone who’s 60, fit and active may be prepared to go through the process given that they know they have certain risks of dying or being worse. This is what they want. But if I’m 85 and have a painful hip, and have a 1 in 10 chance of dying in the operation, I may take a different view. [Jonathan Fielden, quoted in 30, p. 38]

Medicine has been defined as “a vocation in which a doctor’s knowledge, clinical skills, and judgement are put in the service of protecting and restoring human well-being” [29, p. 14]. Hilton and Slotnick [31] emphasize three of Aristotle’s five intellectual virtues: *episteme* (specialised knowledge required for practice), *techne* (technical skills or craftsmanship required for practice) and *phronesis* (“know which rules to break and how far to break them to accommodate the reality at hand”) [31, p. 61; p. 64]. Even in the context of evidence-based medicine (for evidence, read ‘empirically validated generalisations’ rather than the ‘facts of specific cases’)³, the judgment of doctors may be crucial in specific situations such as the management of uncertainty, in dealing with ethical issues, and matters of human care [30, p. 5]. *Phronesis* is “arguably a *sine qua non* of the mature professional in action” and it “implies insights and judgments based on the experiences arising from dealing with conflicts and uncertainty” [31, p. 61]. The mature professional exhibits not only *episteme* and *techne*, but also *phronesis* [31, p. 64]. A distinction can be made between a ‘technician’, who works according to algorithmic rules and procedures and a ‘professional’ who uses judgment in such situations [30, p. 21]. This judgment often has a tacit experiential basis [29].

From the perspective of medical education, Hilton and Slotnick [31] identified the following six attributes of professionals: i) ethical practice; ii) reflection and self-awareness; iii) responsibility/accountability for actions (commitment to excellence/lifelong learning/critical reasoning); iv) respect for patients; v) working for others (teamwork); and vi) social responsibility. With regard to ethical practice in medicine, the Royal College of

² “The Oxford English Dictionary distinguishes two senses of the term ‘consumerism’: one, first used in 1915, referring to the ‘advocacy of the rights and interests of consumers’; the other, first used in 1960, referring to an ‘emphasis on or preoccupation with the acquisition of consumer goods.’” [30, p. 37]

³ “Evidence-based medicine (EBM) refers to a shorthand version of clinical epidemiology that clinicians can use to evaluate and apply research results in medical practice. It offers formal rules for evaluating research information that emphasize epidemiological information, especially clinical trials, as the gold standard for medical decisions” [32, p. 187]. The term first appeared in the scientific medical literature in the early 1990s [33, 34]. It was inspired in particular by Archie Cochrane and Alvan Feinstein [35, p. 12], whose work expressed distrust of traditional clinical authority. EBM emerged from McMaster University, where Gordon Guyatt was Director of the Internal Medicine Registry program in 1990 [35, p. 18-19]. Evidence-based medicine has been described by Guyatt and his colleagues as “a structure for optimal practice” [36, p. 166] and it can be viewed in terms of inductivism, falsificationism and explanationism [36, p. 159]. Key reference sources are by Guyatt and Drummond [37] and Sackett [38].

Physicians' working party on medical professionalism stated: "The entire ethos of professionalism is, for most doctors, closely bound up not only with what they do but also with how they view themselves as an individual person" [29, p. 33]. Education and training are vital for strengthening this ethos of professionalism [29, p. 33]. Reflection and self-awareness are tied in with appraisal, good systems of which are fundamental to medical professionalism, in terms of reflecting on professional values and threats to those values such as commercial conflicts of interest [29, p. 36-37]. Coulehan [39] states that "a large percentage of our graduates are best characterized as nonreflective professionals; that is, physicians who believe that they embody virtues like fidelity, self-effacement, integrity, compassion, and so forth, while acting in ways that not only conflict with these virtues, but also contribute to contemporary problems in health care such as rising costs, inadequate physician-patient communication, and widespread dissatisfaction" [39, p. 893]. The Royal College of Physicians' working party also noted that "the partnership between patient and doctor" is one based on mutual respect, individual responsibility, and appropriate accountability" [29, p. 14]. Health care in teams involves both collaborative judgment and personal accountability, thus "professionalism may be more about recognising one's own areas of weakness [i.e., self-awareness] and taking responsibility for ensuring they are matched by strengths in colleagues" [30, p. 7]. Essentially, however, this new medical professionalism is based on mutuality rather than individuality; i.e., relationships rather than autonomy [30, p. 14, citing 40]. Doctors need to "find their place in a complex ecosystem of roles and responsibilities" [30, p. 53], "recognising which role any given situation calls for" and thus use their professional judgment [*phronesis*] [30, p. 7].

SCIENTISM

Evidence-based medicine has been associated with scientism, which is "the belief that scientific descriptions of reality are the only ones that matter" [41, p. 97]. Leggett [41] argued that scientism has led to doctors focusing on disease and "investigation management" rather than the disease and patient:

If the individuality of the patient is denied, then management becomes solely dependent on the state of the disease. Some have argued that, because a certain treatment has statistically the best outcome, then that is the correct management for all patients with this condition. This ignores the context in which the condition arises. If we accept that factors exterior to the disease may have a bearing – e.g. age, general health, psychological make-up – then a single condition can be correctly managed by a complete range of treatment options, from the most radical to nothing at all. The factors determining correct management may be totally independent of the disease. As an example, correct management of a large carcinoma of larynx may be laryngectomy, but when the patient is demented and very old the operation is contraindicated. [41, p. 99]

In line with Leggett, critics of EBM and its associated scientism in clinical practice have advocated a "person-centered, relationship-based, holistic model of care" [42, p. 943].

Haack [43] has argued for the need to avoid "both under-estimating the value of science, and over-estimating it" [43, p. 2]. In reference to her book *Defending Science – Within Reason: Between Scientism and Cynicism* [44], she explains that "cynicism" is "a kind of jaundiced and uncritically critical attitude to science, an inability to see or an unwillingness to acknowledge its remarkable intellectual achievements, or to recognize the real benefits it

has made possible” and “scientism” is “a kind of over-enthusiastic and uncritically deferential attitude towards science, an inability to see or unwillingness to acknowledge its fallibility, its limitations, and its potential dangers” [43, p. 2]. Haack indicates six signs of scientism:

- 1) Using the words “science,” “scientific,” “scientifically,” “scientist,” etc., honorifically, as generic terms of epistemic praise.
- 2) Adopting the manners, the trappings, the technical terminology, etc., of the sciences, irrespective of their real usefulness.
- 3) A preoccupation with demarcation, i.e., with drawing a sharp line between genuine science, the real thing, and “pseudo-scientific” imposters.
- 4) A corresponding preoccupation with identifying the “scientific method,” presumed to explain how the sciences have been so successful.
- 5) Looking to the sciences for answers to questions beyond their scope.
- 6) Denying or denigrating the legitimacy or the worth of other kinds of inquiry besides the scientific, or the value of human activities other than inquiry, such as poetry or art. [43, p. 4-26]

With regard to the first sign, Haack makes the point that “not all and not only scientific evidence is good evidence [in a rational method of inquiry], and not all, and not only, scientists are reliable inquirers” [45, p. 23]. The second sign is seen in particular when the methods and techniques of the natural sciences are transferred inappropriately to the social sciences; i.e., “as a smoke-screen hiding shallow thinking or half-baked research” [43, p. 7]. Haack explains the third sign by showing the limitations of Popper’s notion of falsifiability as the criterion of what is genuinely scientific rather than pseudo-scientific. The fourth sign makes the point that there is no single ‘scientific method’ “used by all and only scientists” [43, p. 17]:

Like any *empirical* inquirer, a scientist makes an informed conjecture about the possible explanation of some puzzling phenomenon, figures out the consequences of the conjecture’s being true, checks how well those consequences stand up to the evidence he has and any further evidence he can lay hands on, and then uses his judgment whether to accept it, modify it, or abandon it and start again. But *scientific* inquiry, like scientific evidence, is more so: scientists have devised models and metaphors to aid the imagination, instruments of observation to aid the senses, sophisticated experimental controls to block misleading evidence, mathematical, statistical, and computing devices to extend our limited human reasoning powers, and even a social organization of mutual scrutiny, peer review, rewards and incentives which helps keep most scientists, most of the time, reasonably honest. All are fallible and imperfect; but nevertheless they are genuine helps.
[45, p. 25, emphasis added]

Haack refers to examples such as whether abortion is morally acceptable or legally permitted to explain the fifth sign, and states “something goes wrong when [scientists] allow their ethical or political convictions to affect their judgment of the evidence, or when they present those ethical or political convictions as if they were scientific results” [43, p. 19-20]. However, Haack argues that “the idea of science as *purely* factual, as *entirely* ‘value-free,’ and *wholly irrelevant* to normative questions, is far too crude” [43, p. 20; emphases original].

In discussing the six signs, Haack acknowledges the benefits of advances in medical science but at the same time recognises that people may feel “some unease about the impersonal character of technologically sophisticated modern medicine” [43, p. 25-26]. She argues that “to forget that the technological advances that science brings in its wake, much as they have improved our lives, have also sometimes come at a real cost in the displacement of traditional practices and skills, is itself a kind of scientism” [43, p. 25-26].

SEAN FOLEY

Sean Foley (Tiger Woods’ current coach) was voted 2nd by his peers in *Golf Digest’s* Best Teachers ranking for 2013-2014, rising from 35th in the previous ranking [46]. A number of statements made by Foley manifest scientism, especially the first three of Haack’s [43] six signs of scientism. The following statements manifest the first three signs:

[On the importance of impact]

...my quest has been about trying to get rid of all the dogma and semantics, and try to come up with more fact-based opinion. [47, p. 32]

[What would you say is at the heart of your coaching beliefs?] I would say that it is recognising that impact is a true science. The rest of the golf swing is opinion. [47, p. 34]

In discussing his use of TrackMan, which is a Doppler-radar device that measures ball flight, Foley manifests the third sign:

It’s not pseudo-science. It’s straight physics, geometry and biomechanics. When I show them, they can’t really argue. [48]

On the matter of ‘golf analytics’ and the work of Columbia University professor Mark Broadie, Foley manifests the fourth sign:

Mark Broadie is giving us factual information that comes from taking hundreds of different variables and creating extremely complex algorithms... [47, p. 37]

[Mark Broadie’s] proved that the old adage of drive for show, putt for dough is untrue. The past five years or so the five longest hitters average something like 21st in the Money List. The five straightest hitters average something like 120th. The top-10 ball strikers in the world average 13th or 14th in the World ranking; take the top-10 putters and they average 62nd in the world. [47, p. 37]

With regard to making swing changes, Foley’s answers to a journalist’s questions manifest the second sign:

When I asked him to explain Rose’s rise over three years from 67th to 19th to fifth in one measure of long-iron excellence, Foley gave me a one-word answer: “Myelin.”

Excuse me? “That’s the insulation that wraps around neural brain circuits and helps them fire faster when presented with certain stimuli,” he said. Laying down more myelin, over time, helps secure new skills; that’s the value of those reps Woods

⁴ Ideas about myelin and learning have been popularised in Daniel Coyle’s “The Talent Code” [50].

always talks about. “ ‘Swing change’ is really a stupid term, because it’s actually just gradual evolution in encoded brain patterns,” Foley said.⁴ [49]

Sean Foley’s vocation is “the search for the perfect shot” whereas for the Tour player it is all about the “search for the perfect round” [47, p. 32]. He does not get involved in course strategy/management, but rather leaves that to the player with his caddie. However, he does help the player develop a particular shape of shot for playing on a particular course [51].

I was a “why” person even as a kid. I questioned everything, and with the golf swing there’s an awful lot of “why.” When my dad took me to the Canadian Open at Glen Abbey when I was 14, he went onto the course to watch the players, and I went to the range to watch teachers work with players. I sat on a hillside watching David Leadbetter work with Nick Faldo for as long as they were there. The instruction articles in the golf magazines fascinated me. [52]

I was a great ball-striker and had a good short game, but I was never really a great player. I never learned to play the game to make a score. So course management was an afterthought for me. I was more concerned with hitting the perfect shot. [51]

Sean Foley is not currently a PGA member, but he has previously been a PGA of Canada apprentice [Gary Bernard, Personal Communication, 2014]. Foley turned pro in 1997 and competed on mini tours in Florida before focusing fully on golf instruction [53]. He was mentored at Glen Abbey by Tom Jackson [54]. Foley was unveiled as national coach of the Canadian Junior Golf Association in January 2005 after two years as coach for its international teams [53]. The CJGA was founded in 1993 as a not-for-profit “registered amateur athletic association” [53]. Foley moved to Florida in 2006 where he worked for the Junior Golf Academy of Canada (now Core Golf Academy). The Core Golf Academy is “a full time residential golf academy designed to prepare young golfers for success in junior golf, collegiate golf and beyond” [55]:

The program is based on Foley’s experience working with PGA Tour players and elite junior players; his work with some of the top instructors in the world, his studies in a wide range of science, psychology and humanities; as well as his work with leading scientists. Everything taught at the academy has a basis in science, including geometry, physics, kinetics, biomechanics and neuroscience. [56]

While Foley spends most of his time working with Tour players now, he spent much of his career spending hours each day working with junior players. It was when he was working at the Core Golf Academy in Florida that Tour player Stephen Ames contacted Foley for help with his swing. [57].

One of Foley’s first golf lessons was with Greg McHatton, who was a disciple of Homer Kelley’s [58] “The Golfing Machine” [47, p. 32]:

Between 18 and 21, I taught nothing but The Golfing Machine to anybody who would listen. If Homer Kelley had the opportunity to rewrite that book with today’s knowledge and science it would be the golf bible. [47, p. 34]

Foley demonstrates a good understanding of the interdisciplinary nature of science as it relates to the golf swing:

Kelley does a great job of explaining the geometry and physics of the swing, but what the book lacks is that it never says anything about physiology or human beings with 650 involuntary muscles with ligaments and bone fascia. You can understand the motion on a robot all you want, but we aren't robots. Some of our gluts don't fire; some of our hamstrings are tighter than our quads. So for me some of Kelley's physics is superficial to human kinetics and movement patterns and biomechanics. [51]

Foley has indicated that earlier in his career he 'screwed up' many of his pupils [47, p. 34], but changed his "coaching beliefs" when he consulted with "specialists in kinesiology and sports chiropractics" [47, p. 35]:

[Craig Davies, a Canadian chiropractor] taught me about anatomy and physiology. And the parts of the body we're using in the golf swing. I sat down with him for about two hours and literally gave about \$8,000 of refunds the next day. I'd been trying to teach people to move in ways they physically couldn't. [47, p. 35]

At the age of about 30, Foley started coaching on the PGA Tour where he would spend time on the range asking players if he could video them [47, p. 34] and being provided reading material by experts who he consulted [47, p. 35]:

If I was off the tour, it would have taken me about five years to absorb what I learned this year. I spent time with some of the brightest minds in the industry. As members of a new generation of teachers, most of us are more like swing engineers than swing coaches. We all talk about geometry, physics, kinetics and biomechanics. It is great to be part of a group that is changing the way golf is being taught. [54]

The use of TrackMan has been a major component of Foley's coaching of Tour players and it changed the way he worked with players on their swing:

As soon as I started using TrackMan, it helped me not to be didactic and get way off into things like, 'The arm is here, if we could get it here, etc.' Now, if I just change ball position, tee height, maybe make the stance a little wider and we go from an attack angle of 4 degrees down to 1 degree up, and the player is at the same exact clubhead speed, we can be hitting it 25 yards farther and we haven't had to do much of anything. [59]

If I get Justin [Rose] on TrackMan and see that he's four degrees steeper at impact than normal with his driver.... If I then get Justin to hit one at zero, he'll instantly have a feel for what the correct impact should be. ... How we get him to achieve that will vary. It could be a simple set-up tweak or it could be a swing thought like 'keep your nose behind the ball at impact'. In this regard, *you can use TrackMan to find out which swing thoughts work*. [47, p. 35; emphasis added]

On his work with Foley, Justin Rose has been quoted as follows:

Everyone knows Sean as a technician, and sure enough, maths and science play a

big part in his methodology. However pragmatic he may be, *he's anything but mechanical*, and he worked with me to develop a three-phase process to improve my swing by *replacing hard-set positions with feels and triggers*. With just a little practice, these feels and triggers became almost second nature to me, and they helped me groove my swing I always knew was lurking inside. And because they're so simple, they've held up under pressure, something my old motion wasn't capable of. [60; emphasis added]

When asked at a press conference about his use of TrackMan, Tiger Woods indicated how he uses it but was aware of its limitations:

Well, I think you try and confirm feel and real. A lot of times in this game what we're feeling that we're doing is not exactly what we're doing. You're asking someone to make a big change of swinging. Say instead of swinging down six [degrees], swing down four [degrees], and not as far left, all these different things and different components. I just think that *you're trying to match-up feel and real*. And as you make swing changes, you make slight alterations, you start realizing what it does at impact, and what that can translate into in the performance of a golf ball. Is it transformational? I think it is if you understand how to do it. But also not to get embedded in it where you start losing your feel and your touch. Seeing the ball the right number, the right shape, and controlling the right trajectory] and all the other things. You can't just get locked into just hitting for the numbers. *You have to still go out and play off of uneven lies, deal with wind, deal with adrenaline and a lot of different components*. It's not just hitting balls out of a hitting bay. [61; emphases added]

Foley recognizes that golf coaching is not only a science but also an art:

Although I've kind of been labelled as the face of this neo-generation of science-based golf instructors, that does mean I don't value how a Harvey Penick or Percy Boomer taught golf. [47, p. 32]

He understands the importance of *how* a person learns rather than *what* they learn [62, 63]:

"If you have a feel player who has kind of an auditory sense to him, maybe you get him hitting balls wearing a blindfold and barefoot, listening to Chopin. Whatever instills the lesson best." [62]

Foley distinguishes between character and personality – when asked whether it is possible to act the same way with all his players, he replied:

You can be the same from the standpoint of holding them to a standard of *ethics and values*. With Rosey [Justin Rose] we might talk a little bit more. With Hunter we might talk a little bit less. With Tiger I might only speak when he asks me a question. O'Hair wants to talk sometimes and other times he doesn't – so it's about understanding the different personalities. [64; emphasis added]

Foley regards himself as a coach rather than a golf instructor [65], and he appears to be a

spiritual person who models himself on ‘philosopher coaches’ such as John Wooden and an advocate of virtue ethics:

I don’t even think a terrific swing is the main goal. The great coaches – Vince Lombardi, John Wooden, Phil Jackson – are not remembered for how they drew up Xs and Os. Their players never talk about those things. What they remember are the *good values they instilled*, the strong work ethic and the productive approaches to life. My role to my guys, first and foremost, is to be part of their support system, to act out the things I believe in, and be there for them. That’s every bit as important as what I do for their golf swings. [52; emphasis added]

The beautiful thing is that teaching is my therapy. You give people the advice you also need to hear. I have the opportunity to get people to get the most out of themselves, and to *live a life of principle and character*. You really try to understand the life of the person you’re teaching. But no one is going to listen to me if I don’t do it myself. [62; emphasis added]

Your teaching philosophy is going to be an underscore of your philosophy. The mantra for me is what Gandhi said in that we need to be the change we want to see in the world. So it’s not to condemn what we’re trying to change, and I think it was Aristotle who said, ‘A man can’t think his way to proper action; He has to act his way to proper thinking.’ Don’t tell me, show me. That’s some deep stuff I understand, but it’s definitely happening. I just try to lead by example with my guys. My swing philosophy is the same way. I’m not coaching golfers; *I’m coaching human beings* who deal with love and hate and fear and all those different aspects in the emotional arena. If you look at them just as a golfer, you’re missing out.” [66; emphasis added]

One of Foley’s favourite books is Victor Frankl’s “Man’s Search for Meaning” [67]: “He got me to understand that life is all about meaning and meaning is about what drives what we do. For me, the meaning is learning and inspiring” [47, p. 34]. Justin Rose has stated the following:

Sean is very *spiritual*. He is not necessarily religious, but he is highly *philosophical*. He reads many interesting texts and *practises what he preaches*. He’s a guy who suffered from depression in his early years, grew up tough and with not a lot of confidence, but who has reformed his thinking and become an amazing person. He is misunderstood. But he doesn’t care about that. He is comfortable within the confines of his own head, and he has been such a positive influence on me. [68; emphases added]

After Justin Rose’s victory in the 2013 US Open, it was revealed that he benefitted from a network of support that included not only his coach Sean Foley, but also his wife (Kate Rose), caddie (Mark Fulcher), psychologist (Gio Valiante), manager (Marcus Day), putting coach (David Orr) and personal trainer (Justin Buckthorp) as well as his friend and fellow tour pro (Ian Poulter) [68-70].

In an article entitled, “The Sean Foley Brand”, Foley expresses work-life balance as well as altruism and humility (the former in association with ‘paying it forward’) [71]:

...my ethics and my values and how I perceive myself are important so the bottom line is I'm not going to put my life out of balance to chase money. *Family comes first*. My tour players are next. Once those two things are covered I'm open to other things from a business perspective but on a limited basis." [71; emphasis added]

I'm grateful to have people who want to pay me for things and to do things. But for me I'd like to be Robin Hood in a sense where you're able to take care of people who will never have the fortune you have. A lot of this is luck. That's what creates the *humility*. If Stephen Ames doesn't call me in 2006 am I here now? Maybe. But I can't ever say for sure. Sometimes success comes from things you have no influence over. That's why you have to *pay it forward*. [71; emphases added]

Compare the altruism expressed by Foley to the following statement made by Tiger's previous coach Hank Haney, a PGA member who was ranked 11th in the 2013-2014 *Golf Digest's* 50 Best Teachers ranking [46], in a text sent to Tiger around the time that he resigned as his coach:

Tiger, in every instance when I am asked about Tiger Woods, I always answer in the best interests of Tiger Woods. Every time you are asked about Hank Haney, *you never answer in the best interests of Hank Haney*. It bothers me. It hurts me. If anybody should understand the value of friends at this point in their life, it should be you. I feel like I've been a great friend to you. I don't feel I've gotten that in return. [72, p. 225; emphasis added]

Haney was criticised for writing a book, "The Big Miss"⁵, in which his relationship with Tiger Woods was discussed, by both Tiger Woods and Butch Harmon, who coached Tiger before Haney:

I think it's unprofessional and very disappointing, especially because it's *someone I worked with and trusted as a friend*. There have been other one-sided books about me, and I think people understand that this book is about money. I'm not going to waste my time reading it. [Tiger Woods, quoted in 73; emphasis added]

I'm very surprised that he would write it. I'd never do that to Tiger or Greg [Norman] or any of the guys I've been with. We get to spend a lot of time with these people, sometimes even more time than their own families. Things are said, or you see different things, and it's just - it is what it is, you just leave it where it belongs. I was really shocked to see him talk about Elin and Tiger's kids and stuff like that...[Butch Harman, quoted 74]

Haney regards working with tour professionals not as a job, but rather a "marketing expense" and "for personal satisfaction, for contributing to history, and for marketing your brand" [75].

Foley was asked, "Haney once said, 'I always felt like I knew Tiger from observing. I did not feel I knew him from knowing him.' Has that been true in your case?", to which he replied:

⁵ Haney's ghost writer was Jaime Dias, editor of *Golf World* (USA), who has written numerous articles about Tiger Woods [72, p. 250].

Hank built most of his career around Tiger. I found most of that interview to be unprofessional. I don't understand how, if you don't get to know the person, how you can teach them. There is the business aspect of it where you have to keep things separate from that standpoint, but if you're spending eight hours a day with this person you have to have some things in common. There was no way I was ever going to be able to stand on the range with anyone who was not kind to people or rude just to make my career better. I couldn't care less about it. There has to be a semblance of *ethics and values* in the person. It's interesting to see how hard Tiger works. How kind he is to the people at Isleworth. He's a solid guy.

[64; emphasis added]

Haney acknowledges the importance of the relationship side of golf coaching in articulating his respect for Harmon:

I was also very cognizant of Tiger's relationship with Butch Harmon, whom I've always respected as a great teacher. Regardless of which of us happened to be Tiger's coach over the years, we've always been on good terms. Our philosophies of the physical swing differ a bit, but not as much as people might think. Butch, too, acknowledges John Jacobs' principles as a huge influence. Butch has a big personality and he's fun to be around. With his tour players, what I admire most is how he connects with them as people. He's great at both inspiring and relaxing his players so that they're ready to perform with confidence. That's a huge part of coaching, and he certainly did that with Tiger. [72, p. 29]

Butch Harmon has been voted 1st by his peers in the *Golf Digest* ranking for twelve consecutive years [46]. A former PGA Tour player whose father won the US Masters and was also a renowned golf teacher [76], Harmon is not a member of the PGA of America: "In the 1980s, I attended the PGA of America's business school so I could get my Class A card. I didn't pass the exam. Failed the teaching section" [77]. Peter Kostis, who is 31st in the 2013-2014 *Golf Digest* ranking [46], has stated: "The relationship – the likeability factor – between teacher and pro is every bit as important as the quality of the instruction. Butch makes sure he doesn't hurt anybody, because at the tour level *it's easy to hurt more than help* in the process of trying" [78; emphasis added]. Harmon himself has stated:

If there's a secret to my success teaching tour players, it's that I treat each of them differently. They all have their own personalities and swings, and I don't try to make them swing alike. My father taught me never to take away what someone does naturally, just try to make it better. ... With tour pros, *you have to be very precise every time you tell them something*, because you're dealing with their livelihoods. They're extremely talented individuals, so they pretty much can do what you want them to do. With amateurs you can experiment more. You can say, 'That didn't work; let's try this.' [78; emphasis added]

How did Foley come to work with Tiger?

Woods says there are two reasons he turned to Foley. "One, knowledge and, two, every one of his guys were good ball-strikers," he says. "I have learned so much about the golf swing as far as path and how it travels and the body movements that

I did not know. Also, one of the reasons *why I hurt my knee* all those years ago, what I was doing and how we can play around that.” [79; emphasis added]

Their similar age would give Woods, 34, surrounded by older people throughout his professional life, a close associate and friend in his peer group. Like Woods, Foley is a father (he and his wife, Kate, have a 2½-year old son, Quinn), is into fitness and sports, and can more than hold his own in the needling and bawdy humor that is the lingua franca of the practice tee. And though both men love to talk golf technique and history, Foley’s intelligence and knowledge of multiple subjects intrigues Woods, who enjoyed being around “brainiacs” in his two years at Stanford.

Woods also respects that Foley is no sycophant. Foley doesn’t deny that he’s excited to work with Woods but maintains that he would remain very content with his Orlando-based career without him. Foley says he has had no problem telling Woods he’s wrong about some swing issues, and that *he has challenged him* just as he does all his students. “I won’t ever be a yes man,” he says. And Foley suggested another bond by bringing up his experience playing golf for Tennessee State, a historically black college. “I’ve always appreciated what Tiger’s doing in a historically Caucasian sport,” Foley says, “and I think because of my experiences *I have empathy for him.*”⁶ [62]

In an interview, Foley criticised Haney’s work with Tiger:

“Let’s be honest about this, it’s not like he was flushing it with Hank,” Foley said. “I think he hasn’t been happy with how he’s hit it for a very long time.” Indeed, Foley has spent much of their time on the range together ridding Woods of what he calls “counter-intuitive moves introduced in order to offset something else that didn’t need to be there” [81].

Haney’s response to this criticism was:

I was irritated, but my lasting thought was that Sean hadn’t yet learned that Tiger had some difficult swing issues and that simply imposing *what Sean believed was a biomechanically “correct” swing might not be the solution.* In other words, Sean didn’t know what he was dealing with. As Butch had once told me, coaching Tiger was harder than it looked. [72, p. 238; emphasis added]

Harmon has been quoted as follows in this regard:

You have to have thick skin to sit in that chair. Of the three of us, myself, Hank [Haney] and Sean, I had the easiest job. I had Tiger when he was younger. Sean has probably the toughest job. *He’s got an older Tiger Woods who’s had four knee surgeries, who’s had a lot of off-course problems.* I never had to deal with any of that. [79; emphasis added]

Foley has indicated that he didn’t regret anything he said about Haney, but did admit that he

⁶ Regarding his time at Tennessee State University, Foley has been quoted as saying: “At first I was trying to impress everyone I met, and I wasn’t being accepted. I learned I had to be secure in myself before others would accept me. It led to a lot of really great friendships. I carry that lesson today” [80].

“reacted perhaps in an unprofessional manner” [76].

Foley has stated that “the biggest mistake a teacher can make with a tour pro is to change the grip”:

I learned the hard way with Parker McLachlin, who came to me not long after he’d won in 2008. I thought his left hand was too strong, so I suggested that he make it more neutral. Parker went along, and it radically changed the way he released the club. He had a terrible time integrating his new release to the way he related to his target. [52]

Similarly, Haney has stated that grip changes are “huge decisions for pros, because in the short term they’re uncomfortable and greatly affect feel” [72, p. 67-68]. Haney worked on “a big adjustment to Tiger’s grip” [72, p. 98]. Foley changed Tiger’s grip too; here is Haney’s view on the matter:

When Sean made Tiger’s grip even stronger (by having Tiger turn his left hand more clockwise) than it had been when I began working with him in 2004, I thought it was *risky*. While I understood that the goal was a more powerful position that produced more solid and longer shots and that many top players have played and do play with such a grip, *I felt it was a radical change for a player in his mid-30s*. If Tiger’s hands ever reverted to their old position in the hitting area, it meant the face would close and the ball would head left. Tiger indeed began hitting more such shots, and I noticed that by the fall of 2011 his grip had moved back to a weaker position. [72, p. 239; emphases added]

On the matter of risk, consider the following statement from Tiger:

If I play my best, I’m pretty tough to beat. I’d like to play my best more frequently, and that’s the whole idea. That’s why you make changes. I thought I could become more consistent and play at a higher level more often. ... *I’ve always taken risks to become a better golfer*, and that’s one of the things that has gotten me this far. [82; emphasis added]

Haney explains Harmon being fired by Tiger as follows:

I think what really turned the tide was Butch’s belief that the best approach with Tiger after he solidified his swing changes was *maintenance*. This is definitely an old-school view that has a lot of merit. It holds that a person’s swing is basically that person’s swing and that once the big issues have been resolved, refinement rather than more reconstruction is the wisest policy. Golf history is littered with good players who got worse trying too hard to get better, and Butch didn’t want Tiger to fall prey to the same syndrome. But such an approach went against Tiger’s grain. He wanted to always be consciously doing something to get better. It was as if he needed the stimulation and *the challenge to get better*. ... Tiger didn’t grow tired of Butch the person as much as *he grew tired of what Butch was teaching him*. [72, p. 34; emphases added]

Since early 2004, when Woods started working with Haney, Woods has strived to “own” his

swing [83]: “Only two players have ever truly owned their swings: Moe Norman and Ben Hogan. I want to own mine. That’s where the satisfaction comes from” [82]. In 2008 Steve Williams, who was caddie for Tiger was quoted as saying:

Hank has been invaluable to Tiger, no question. In the last three years *he’s picked Hank’s brain and totally trusted him with his golf swing*. But in the maturity process that a golfer goes through, he doesn’t want to get too reliant on a coach, because it can cause a loss of feel, and golf is a game of feel. Hank remained his *guide*, but ultimately it was important for Tiger to find his own way. [83; emphases added]

In his book about Tiger, Haney presents the following statement from a press conference that Tiger gave:

I love picking guys’ brains, whether it’s Hank or Butch or Lead [David Leadbetter] or anybody. I love Bob Torrance [a Scottish swing coach], always got good stories about the golf swing from him. ... It’s always nice to be able to pick someone’s brain about the golf swing, and Hank has always been that since college for me. There are different ways of looking at the same things. That’s one of the things that you get from all the different teachers. They’re trying to accomplish the same thing in a different way of wording it, and it was nice to hear something that Hank said about my golf swing...some of the stuff I throw out, some of the stuff I’ll try, and it either works or I’ll throw it out later. ... One of the things I’ve always said, even when I was working with Butch at the time, ninety percent of the things I’ll hear, I’ll throw out. Five percent of the things I hear I’ll try and throw out, and then five percent I’ll try and I’ll use. It’s just one of those things where you try to get a feel for what’s going to work. Some of the things Butch and I would work on, I would say, “That’s not going to work,” and I’d throw it out. That’s not going to work on the back nine on Sunday. [72, p. 55; emphasis added]

CONCLUSION

The discourse associated with Sean Foley is strongly couched in terms of professionalism, especially specialized knowledge, ethics and altruism. Foley appears to realise that altruism should go hand-in-hand with humility. He comes across as being self-aware and someone who reflects on professional values. The relationship between trust and risk is shown by the challenges of working with Tiger Woods, especially in terms of Tiger’s motivation and injuries. From what Tiger Woods has indicated about his use of TrackMan, it does not seem that Foley is a ‘technician’ (even though Justin Rose uses this term to describe him) who attempts to use TrackMan by following algorithmic rules without professional judgment. To a large extent, Foley seems to be a blend of Butch Harmon, in terms of the importance of coach-player relationship, and Hank Haney, with regard to emphasis on technical instruction, and John Wooden, with his emphasis on ethics, values, and virtues.

Foley’s success in coaching tour pros came from largely informal, work-based /work-place learning although he did graduate from Tennessee State University, majoring in philosophy. Some of Foley’s statements express scientism, yet he appears to take a holistic approach to coaching with a particular emphasis on ethics and values. Foley has indicated that he ‘screwed up’ numerous golfers early in his teaching career due to lack of specialized knowledge about kinesiology. Like Harmon, Foley is not a member of a PGA. Would he more likely be a member of a PGA if they provided a Master of Science degree in Golf

Teaching/Coaching, especially if it took a holistic approach; i.e., bringing together the ethical, spiritual, mental, physical, technical and strategic dimensions of the game?

Master's degrees are intended to be very much at "the forefront of an academic or professional discipline" [84] and are characterised by "exploration of boundaries where preceding levels focused on knowledge and skills within them" [85]. Studying for a Master's degree involves scholarship. Given its root in the Latin *schola* or 'school', scholarship has been described as "an intrinsically communal enterprise – building on, revising or replacing the work of predecessors" [86, cited in 87]; i.e., scholarship "stands in relation to what has come before" [88]. Boyer [89] defined scholarship in terms of discovery, integration, application and teaching of knowledge. Rice [90] expanded on Boyer's work, and on the scholarship of teaching. He writes that it:

...has at least three distinct elements: first the *synoptic capacity*, the ability to draw the strands of a field together in a way that provides both coherence and meaning, to place what is known in context and open the way for connection to be made between the knower and the known; second, what Lee Shulman calls *pedagogical content knowledge*, the capacity to represent a subject in ways that transcend the split between intellectual substance and teaching process, usually having to do with metaphors, analogies and experiments used⁷; and third, *what we know about learning*, scholarly inquiry into how students "make meaning" out of what the teacher says and does. [90, p. 125]

In a *Golf Digest* instruction article, Foley stated:

Many of you would probably give up red meat if you could consistently hit a sweet, little draw. If you've struggled for years trying to get the ball to start just right of the target and curve back to it, stop blaming a lack of ability. It might be a lack of understanding for how this shot is created. For instance, you might have been taught that to hit a draw, your clubface has to be facing left of your target at impact. That is incorrect. You also might have been told that the path of the club through impact is what determines the ball's initial direction. Also wrong. Thanks to a company called TrackMan, which developed a "golf radar" that can record and measure any part of a golf swing and the ensuing ball flight, we now have indisputable science on what produces a draw. I want to share these findings with you, and give you some advice on how to adjust your swing to take advantage of them. You'll be drawing the ball with ease in no time. [92]

In fact, the science has been available for decades in "The Search for the Perfect Swing" [93]. The main contribution of TrackMan has been technology to produce empirical data that has a high degree of accuracy and providing education to the golfing world about the 'ball flight laws' (see Jenkins [94, p. 57]).

The aim of a Master of Science in Golf Teaching/Coaching ('golf coaching') would be to facilitate the development of professionalism in golf coaching. Objectives would include:

⁷ Shulman defines pedagogical content knowledge as "the dimension of subject matter knowledge *for teaching*": "...the most powerful analogies, illustrations, examples, explanations, and demonstrations – in a word, the ways of representing and formulating the subject that make it comprehensible to others. Since there are no single most powerful forms of representation, the teacher must have at hand a veritable armamentarium of alternative forms of representations, some of which derive from research whereas others originate in the wisdom of practice" [91, p. 9].

- To promote a holistic approach to golf coaching that bridges the gap between ‘science’ and ‘art’
- To recognise that golf coaching involves specialised and complex knowledge of a multi- and inter-disciplinary nature
- To present a scholarly, theory-driven approach to the study of golf so as to improve the quality of research on golf coaching
- To draw critical attention to scientism, pseudoscience and non-science in golf coaching
- To empower women in golf coaching
- To provide leadership in golf development, especially with regard to inclusiveness
- To advocate golf for the disabled, especially the Special Olympics
- To raise awareness of golf as an activity that is associated with fitness and a healthy lifestyle
- To place golf coaching in the context of golf development, including the current emphasis on ‘growing the game,’ from a variety of standpoints including historical and economic
- To contribute intellectually and politically to discourse on the rules and etiquette of golf

Modules on the Master’s degree might include:

- Philosophy and Psychology for Golf Coaches
- Long Term Player Development: Golf Pedagogy, Motor Learning and Human Lifespan Development
- Golf, Fitness and Health
- Golf Swing and Ball Flight Analysis
- Kinanthropometry, Functional Anatomy, Biomechanics and Golf Equipment Technology
- The Art and Science of Putting, Chipping and Pitching and the Short Game
- Golf Analytics
- Mental Skills Training for Golf
- Mentoring for Golf Coaches
- Team Golf, Leadership and Management
- Golf Coaching and Special Populations
- Philosophical Pragmatism, Reflective Practice and Action Research for Golf Coaches
- Golf Development: Historical, Social and Economic Aspects

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