INTRODUCTION

While written with models in mind, the focus for the original paper and this response is to act in the broad interests of coaching and its fate as it grows as a discipline and a profession, and to spark debate and discussion about the nature of coaching, coaching practice, and our understanding of it. Coaching continues to evolve and in some cases is undergoing a period of unprecedented change [1]. Change presents both impetus and opportunity to develop the conceptual base of coaching and add to knowledge and understanding of practice. In his commentary, Britt Brewer suggests a line of argument that is underpinned by pessimism and antipathy. Instead, the purpose is to imply a healthy scepticism to current coaching research ‘truths’ and suggest a cautious approach to constructing, developing and re-constructing our understanding and representation of coaching practice. Debates and discussions such as these are key to further intellectualisation of coaching; a process that is essential for defining coaching’s identity, and in meeting the challenge of becoming a bona-fide profession [2, 3, 4].

It is important, however, that debate and discussion should not become an end in itself, and “waving theory from the balcony” [5, p. 149], will result in the development and perpetuation of ‘knowers’ of theory, and perhaps more significantly, the establishment of a theory-practice binary [6]. Whatever method or approach is utilised to engage with coaching and coaching practice, the starting place for conceptual development and understanding needs to be grounded in practice and empirically supported. Upon this point it seems that the commentators and I are all agreed, and it is this fundamental notion that forms the main plank of the response in this case. It is worth re-iterating that far from being ‘belief based’ as suggested by Mike Voight or indeed ‘assumed’ as suggested by John Lyle, the key arguments presented in both the target article and this response are empirically grounded and supported by a growing body of research conducted with coaches themselves in a range of settings [7-13].

WHAT WE CURRENTLY KNOW DEPENDS ON THE QUESTION YOU ASK

Arnold LeUnes comments that ‘we know little about coaching and the coaching process’ and suggests that the literature is ‘sparse, unfocussed and subjective’. Despite a growing body of work, coaching unfortunately remains under-researched and as Wade Gilbert argues in his
commentary, the coaching research agenda is too often driven by personal interest, with coaching and coaches acting simply as data sources. This is not helped by a predominantly narrow, reductionist, rationalistic and bio-scientific approach to coaching [2, 14-16], a point commented on by both Cliff Mallet and Wade Gilbert.

While useful if not limited in developing our understanding of coaching, this type of research consistently, and frustratingly, reduces the complexity of practice by presenting coaching in overly systematic and unproblematic ways [17]. This approach to coaching research, an example of which is presented in Mike Voight’s commentary, presents a false hope in our quest to grasp the sophistication of coaching practice. The presumption is that a positivist science, which reduces coaching to episodes of neat dependent and independent variables, can account fully for what coaching practice actually entails. This presumption is fundamentally flawed. Indeed, separating and specialising components of real-life coaching, then feeding them back to coaches to make sense of, results in abstractions that become a substitute for real life, where coaches are considered to be solely motivated by a narrow reductionist logic [17]. It is these representations that produce on one hand, the illusion of a ‘complete’ understanding; while on the other hand, are viewed with irony and even cynicism by practitioners and hence fail to impact the practice realm.

Approaching coaching practice with Britt Brewer’s multi-level statistical models has some utility, but what is less convincing is the notion that coaches want coaching to become reduced to a maze of statistical calculations. As Wade Gilbert argues in his commentary, in whose interest and whose agenda would such an approach serve? Moreover, by definition we lose reality through any representation of coaching; particularly when it is represented by a list of variables connected by blocks and arrows. It is instead in the aetiology of such variables and the links between and behind them that “much of the functional complexity of coaching occurs” [17, p. 166]. Albert Petipas in his commentary recognises the importance of grasping such complexity and advocates a systems approach and again this approach may have some utility. However, is coaching the same as a ‘system’ that is cohesive and co-ordinated with a common purpose [18, 19]? Or is it instead perhaps a relational, dynamic social microcosm that needs to be understood not as a benign social space, or indeed a ‘system’, but as something that creates and recreates difference [20]; a space where identities and hierarchies are formed and endlessly disputed and contested?

Importantly, these questions, criticism and alternative perspectives are not designed to claim superiority of one method or paradigm over another, but suggest that making a reductionist approach central to understanding practice is problematic in that it serves only to define coaching both narrowly and unilaterally. What Schön [22] would characterise as ‘technocratic rationality’ has thus far produced dominant, but at the same time, weak notions of theory-practice relations, and as such has impoverished practice. This in turn has also helped to construct a weak and limited basis for a professional identity that continues to disadvantage both coaching practice and coaching’s professional standing.

Moreover, the test of the utility and value of research to a community is the extent to which its findings are (a) used as recommended practices in the preparation of practitioners and (b) incorporated by practitioners in everyday practice [22]. Despite the research base that exists and the seemingly positive examples cited in the commentaries of Mike Voight and Britt Brewer, there is little or no evidence for the systematic application of these, or any other, in the development of coaching practice or coach education [23, 24] in terms of either methodology or results. As Wade Gilbert remarks in his commentary he is ‘yet to meet a coach that referenced a coaching model when describing what they do’. I suspect Wade is not alone! And it would seem that Britt Brewer is correct when remarking that models or theories that do not work are ‘quickly discarded or ignored’. 
The commentaries do lend support to the notion that there remains much we are to learn about coaching practice and its inherent complexity, and that there is a dearth of research investigating coaching in any consistent or conceptual depth. However, as our understanding of coaching becomes more sophisticated and a shift in the nature of coaching research occurs we should not disregard existing accumulated knowledge, but rather consider ways to integrate new knowledge with what is already known. It is not in the interests of coaching and its development to block or delay integrating existing contributions or ideas in establishing a more sophisticated knowledge base [25]. So the challenge lies not only looking for new ways to understand coaching, but also how to build on existing work.

UNDERSTANDING COACHING PRACTICE

Increasingly, research supports the notion that coaching is not something that is merely delivered, but a dynamic social activity that engages coach and athlete [9-12; 17] and is built upon a web of complex context and inter-dependent activities that come together to form a holistic process [10, 13, 16]. Coaching is a remarkably intricate yet coherent process incorporating a myriad of individual variations that each coach, athlete and coaching context add to the blend. Understood as such, coaching is essentially social in nature. Looking at coaching as a social practice means understanding it arising in, with and from the socially and culturally structured world [26]. Importantly, this means moving beyond the coach and coaching being primarily cognitive and adopting a less impersonal view of things such as knowledge, skills and tasks [27].

Drawing on Wenger’s work in this case is driven by the need to move away from an asocial characterisation of coaching practice and usefully draw upon theorists that consider “relations among person, activity and situation as they are given in social practice” [28, p. 7]. Social practice is the primary generative phenomenon of which learning and communities of practice are an integral part [29]. Tania Cassidy comments quite rightly that Wenger [30] does not speak specifically about coaching practice, nor indeed any other specific practice, but about social practice. As Fuller et al. [31] contend, “Lave & Wenger envisaged that their theoretical approach would be relevant to all areas of social practice” [31, p. 51], of which coaching is clearly one. Coaching is a social practice that requires engagement and interaction with others, but this does not necessarily mean the existence of a ‘community of practice’ [32].

As a concept, communities of practice do have the potential to offer a great deal in helping develop an understanding of coach and athlete learning and knowledge construction through direct experience of social practice [33], and by definition offer something to our understanding of social practice itself. However, it is important to see the principles behind the social production of coaching practice; we need to avoid seeing coaching in terms of a priori concepts. The development of coaching as an autonomous field requires we do more than solely apply the theories from other disciplines. Coaching is ill-defined and under theorised [34] and as such needs both a critical and reflexive vista as well as ‘thinking tools’ in its on-going development. The utilisation of theories from other fields need to be considered as threshold concepts [2, 35] that act as signposts to new ways of seeing and understanding [2]. To go beyond this presents the threat of being overly influenced or colonised from other fields. There is of course a utility in drawing on relevant theoretical resources from other perhaps ‘similar’ fields, but also a compelling need to develop our conceptual understanding.

The key to this lies in coaching practice. Understanding it remains the cornerstone to conceptual development and engaging practitioners. For example, how coaching impacts the
subjectivities of those involved and how coaching is experienced as both a social space and a social structure offers fertile ground for conceptualising coaching. Against this backdrop, any consideration of interaction and discourse within the coaching process, and of the coaching process itself, devoid of context is both flawed and limited. Our thinking then should not be about producing definitive definitions or indeed ‘models’ per se, but about thinking with greater depth and detail to increase our understanding about practice [17].

Practice is increasingly being seen in terms of ‘structured improvisation’ that is neither entirely reason based or planned, and is far from systematic but highly problematic and individual; a set of reciprocal relations between athlete, coach and context [7–11, 13]. These descriptions of coaching practice are not based on ‘assumptions’ as John Lyle suggests in his commentary, but on research evidence in a range of sporting contexts, including individual sports [7–9, 11]. Coaching as improvisatory practice or ‘structured improvisation’ is not something that coaches would choose necessarily, but there is no other way that coaching could work. If Lyle wishes to argue for ‘control and predictability’ within coaching practice, then it is his assumptions that need to be evidenced.

Lyle’s commentary does suggest that he feels that coaching is not chaotic, a sentiment I would share. However, I would argue that the evidence presents a compelling view of coaching as both complex and ambiguous. Moreover, Lyle recognises this inherent complexity of coaching practice and fears a loss of the ‘essence’ of coaching through attempting to grasp this complexity; a loss that existing research has, arguably, thus far been unable to overcome.

OUTLINING THE LANDSCAPE FOR A RESEARCH AGENDA

Coaching practice is not a construct that is in someway subordinate to the needs of empirical work. The relationship between research and practice, and researchers and practitioners therefore needs to be further developed. Indeed, coaching practice informed by and informing research is worthy of further discussion. As Wade Gilbert and Cliff Mallett comment, coaching and coaches collaborating with research is one method to move the coaching process from object to instrument of analysis. We need to strike up a dialogue with practitioners and demonstrate an engagement and collaboration with coaching practice.

In doing so, coaching researchers and research must grasp the dual character of coaching practice with its subjective and objective aspects, because a polarised research field can lead to a reductionist and misleading portrayal of practice and research approaches. The objective/subjective dichotomy is an enduring metatheoretical dilemma [36] and remains a significant obstacle to the construction of a total picture of coaching practice. As Mallett comments, the positioning of the coaching process as an instrument of analysis has the potential to address this as it privileges neither the individual nor the social.

The five features of the coaching process outlined in the target article consider embodied processes and cultural disposition with emphasis on the integration in practice of the agent, the world and activity [37, 38], and as such are not reductions from the everyday world of engaged participation [27]. Focusing on explicit features of a coaching process and at the same time arguing for engagement with practice that is not episodic or reductionist may seem somewhat paradoxical. A focus on episodes tends to promote an impersonal and decontextualised view of practice. In contrast, a focus on social practice can promote a view that can appear relativist and unable to capture any ‘generic’1 features of practice (i.e., the

1 There must be some generic features of coaching practice to enable us to recognise coaching as coaching. As has been argued elsewhere, there is a ‘sameness’ about our uniqueness [10, 15, 26]; not all coaching practice is the same, but it is coaching practice nonetheless. Improvisatory practice is about the meeting place of object and subject and the degree of predictability and control within practice, the how and why, rather than the what.
structure of ‘structured improvisation’). Using the five features of the coaching process identified from research thus far as instruments of analysis, and framing this analysis to focus on coaching practice in the social world, results in a view with the potential to capture specific practice in specific circumstances, thus doing justice to the multiple relations through which practice is defined [27]. Such an approach perhaps offers the potential to transcend some of the ‘oppositions’ outlined in this paper, while integrating them into a broader knowledge framework.

CONCLUSION
Coaches deal with ill-defined problems and practice is subject to high levels of variability and uncertainty. These constraints of practice may be context specific or common to all coaches, but we know little about them and how they operate [7]. These may be ‘coaching intangibles’ as Arnold Le Unes suggests and indeed may or may not be beyond our understanding. However, as Britt Brewer and other commentators suggest, we should not shy away from complexity.

Coaching and its future development need to be informed by a research programme embedded in practice that must be theoretically and empirically sophisticated [39]. There remains a danger that isolated paradigm debate and a forced retreat to disciplinarity [39] will lead to a polarisation of the field and marginalise coaching research and its conceptual development further from practice. If we are to stay close to its social, dynamic and complex nature, ‘models’ of the coaching process may or may not be part of the solution. A more sophisticated understanding of coaching practice is certainly part of the solution. As Marx argued,

...all social life is essentially practical. All the mysteries that lead theory toward mysticism find their rational solution in human practice and in the comprehension of this practice. [40, p. 84]

Analysis of coaching practice in real settings (in collaboration with coaches) provides the tools to better comprehend coaches’ and athletes’ individual and collective work [9].

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