A Systemic Approach to Eliciting and Gathering the Expertise of a 'Knowledge Guardian': an Application of the Appreciative Inquiry Method to the Study of Classical Dressage

Daune West · D. Francisco de Bragança

Abstract   This paper reports on a study in which an interpretive systems-based approach to knowledge elicitation, the Appreciative Inquiry Method (AIM), is used to elicit and record the expertise of what is referred to as a 'knowledge guardian'. A 'knowledge guardian' is an individual who is a current repository and representative of some culturally-embedded knowledge which, for generations, has been passed on through teaching and apprenticeship, and continues to be so. Such knowledge is rich, complex and precious and merits protection. The knowledge guardian in this study is a Portuguese rider and teacher of Classical Dressage. His expertise relies heavily upon the ability to 'feel' and explain such feeling in his teaching. The view of Classical Dressage that emerges from the study emphasises the importance of the individual's psychological development and motivation to participate in the art due to a desire to experience 'brilliance'. The paper describes the process undertaken during the elicitation sessions and provides the models developed and used to facilitate the discussion. These models (Root Definition and Conceptual Model) are of the type commonly associated with Soft Systems Methodology. The paper also provides comments on the use of AIM, the knowledge recorded about Classical Dressage and the reflections of the two collaborators involved in the study.

Keywords   Appreciative Inquiry Method · Soft Systems Methodology models · 'knowledge guardian' · Classical Dressage

Introduction

The research reported in this paper concerns a study which investigates the possibility of eliciting, recording, and thereby conserving the knowledge residing in the care of what will be referred to as a 'knowledge guardian'. We use the term "knowledge guardian" to refer

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to an individual who is a current repository and representative of some culturally-embedded knowledge which, for generations, has been passed on through teaching and apprenticeship, and continues to be so. Such knowledge is rich, complex and precious.

In this study the knowledge guardian, D. Francisco de Bragança, is a practitioner and trainer of Classical Dressage, a discipline that crosses the boundaries of art and sport, theory and practice, science and 'feel', and deals with complex relationships not only between people but also between people and horses. He is referred to in the study as the 'practitioner-collaborator'. The academic researcher in the study has been a pupil of D. Francisco for six years and is the author of the knowledge elicitation (KE) method used (West 1991). She will be referred to during the study as the 'researcher–collaborator'.

The desired outcome of this investigation was not to produce a description of the mechanics of Classical Dressage (i.e. not to elicit the 'rule-base' of the discipline), much of which can be found in books on the subject, but to start to build up a body of knowledge, in some recorded form, of the underlying reasons, passions and individual appreciation of the subject from the perspective of a 'knowledge guardian' in this field. This paper focuses on reporting and reflecting on the usefulness of the Appreciaitive Inquiry Method (AIM), an interpretive systems-based approach to inquiry, to elicit such knowledge. AIM was conceived originally to facilitate the communication process between an investigator and a knowledge 'expert'. A fundamental requirement of this process was that it would allow the expert to offer up a personal description of their expertise without it being shaped and determined by (i) the prior knowledge/perspective of the investigator, (ii) the elicitation method itself, and (iii) the models and structures demanded by technology (e.g. expert systems).

This paper describes the type of problems in KE that AIM was originally designed to address and then explains the approach and how it makes use of the models familiar to practitioners of Soft Systems Methodology (SSM) so as to bring about an enhanced appreciation of a subject area for those involved in the investigation. A brief introduction to Classical Dressage is then presented with an explanation of the reasons why it is a fascinating but difficult skill to learn/teach and why it is an ideal candidate to be addressed through the use of AIM. The study undertaken is described and the models produced are presented and discussed. Emphasis is placed upon a discussion about the use of the models as opposed to the detail of the learning about Classical Dressage but examples are given to demonstrate the learning process experienced by the two collaborators. The paper concludes by drawing out lessons relating to various aspects of the research: the possibility and usefulness of trying to access and record much of what is the 'tacit' knowledge of the 'knowledge guardian', the appropriateness of AIM for this purpose, the difficulties facing such research projects and the benefits of taking a systems perspective from which to approach a study of this type. Current 'academic' published work on equitation is from a scientific perspective (e.g. McGreevy 2007; Warren-Smith and McGreevy 2008; McLean and McGreevy 2010), and so the study reported here represents an attempt to offer an alternative approach to investigating and learning about this topic.

In addition to the reflections on the elicitation process reported in the paper, a valuable output from the study is a unique description of one 'expert's' view of Classical Dressage in the form of a systemic model. Inspection of this model highlights a central theme of sports pedagogy and psychology, a theme that can be found running throughout the Classical Equitation literature from its earliest times (e.g. Xenophon 430–350BC; Duarte 1438; de Pluvinel 1626; Pembroke 1761; Mairinger 1983; Belasik 1993; Karl 2008).
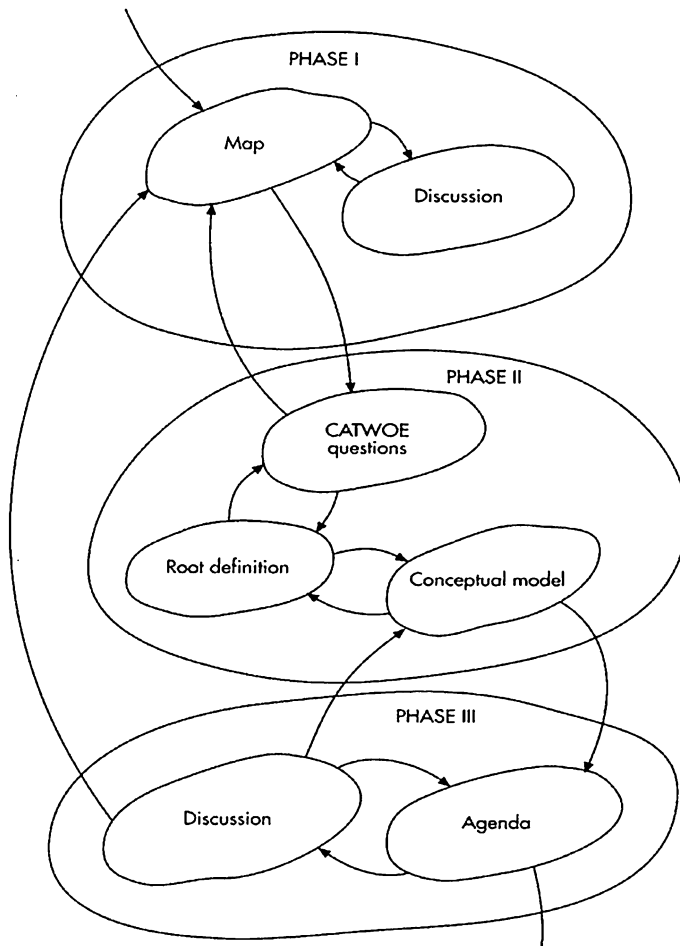
The Appreciative Inquiry Method

The Appreciative Inquiry Method came about as a result of an attempt to address what was then (the late 1980s and early 1990s) a recognised problem area of the development of a particular type of computer programme called an 'expert system'. Expert systems attempted to replicate the decision making of a human being within a particular domain of expertise (e.g. medical diagnostics, large-scale computer configuration, geographical analysis). Developers of these complex computer programs were required to first elicit the human expertise in order to structure this knowledge in such a way as could be 'understood' and manipulated by the computer programme. The field of knowledge engineering, or knowledge elicitation, was famously referred to as the 'stumbling block' of expert system development (e.g. Feigenbaum 1984). To summarise, the problem in this area was that whilst it was possible, to some degree of satisfaction, to elicit the formal 'rules' of the area of expertise using existing KE techniques (see Neale (1989) for an analysis of the then current approaches to KE), the 'tacit', subjective, intuitive aspects of any area of real human expertise, that is those aspects that separate the real expert from the good 'technician', were elusive and could not easily be accessed using traditional KE techniques. In an attempt to consider possible worthwhile approaches to tacking the problems of KE, West (1990) explored an alternative approach to looking at what makes someone 'expert'. Instead of the accepted psychological viewpoint she suggested looking at the development and practice of expertise as an on-going process. In this way she focussed on an individual's ability to appreciate a situation based upon past experience, knowledge, expectations, context, belief and current understanding, and then to make decisions about future action based upon this current appreciation. In other words, the process of *becoming expert* and *practising expertise* was likened to the process that Vickers had described and called an 'appreciative system' (e.g. Vickers 1965). In this way, expertise could be considered as a continuous process of learning. The next step was to consider ways in which it might be possible to tap into and record this process of learning—to find an inquiry system that might help make explicit this learning process. Given that Checkland had already provided the research and arguments to back up the relationship of SSM to the notions of 'appreciation' and 'appreciative system' (i.e. as "an operationalisation of the process Vickers calls 'appreciation'" (Checkland and Casar 1986, p. 4)), it seemed sensible to research the usefulness of the models, or the mechanics, of SSM (e.g. Checkland and Poulter 2006), to address the problems of eliciting the more subjective areas of human expertise. This exercise has taken place through numerous KE studies carried out within an action research framework (e.g. West 1991, 1992; West and Stansfield 2001; West and Thomas 2005). The process of applying, testing and 'validating' these models has led to an approach to KE we refer to as AIM (West 1995).

Although AIM makes use of SSM models the approach is in no way as sophisticated as SSM. For example, there is no intention to seek and enable change but merely to make explicit and explain someone's understanding, or appreciation, of a situation. With AIM the intention is to provide the means of facilitating discussion so as to give form to understanding and to enable communication to take place between those involved in the study. The hoped for result of this communication is to enable the sharing of language and concepts—to allow an expert to offer up a personal description of their expertise that is neither technology nor method-driven, and not shaped to fit someone else's understanding of that area of expertise. This requires that the method used in this elicitation process is subject, or domain, independent: it encourages and allows the expert to form the shape of *their* knowledge according to *their* language, bringing out the connections that *make sense*

to them and not ones that have been created by imposing some structure from outside. An additional problem is that the process of doing this can be difficult since 'experts' rarely have this language and these connections neatly in place: they take time and much effort to establish and experience shows that they are rarely fixed. As soon as ideas are expressed then inspection of these ideas can be made which often promotes re-expression, and so on. In this way expertise is recognised as being dynamic.

Figure 1 illustrates the different phases of the inquiry that might be followed using AIM. Through experience it was learnt that busy experts were usually more receptive to a number of short meetings as opposed to a single "long haul" session. A fundamental starting point for AIM is that the models produced should reflect only the expert's understanding and expression of their expertise. By using systems modeling and language it seems possible to provide sufficient detailed descriptions of the domain in a relatively short conversation between expert and analyst to allow the analyst to work on the modeling phases of the approach away from the meeting.

Fig. 1 Overview of AIM (*source*: West 1995, Fig. 7.3)

At the outset of the study an area for focus needs to be identified and agreed and this in itself can lead to useful debate as the scope of the study is defined. The boundary this scoping imposes, however, should not be seen as set: it may be revisited and redrawn at any time it seems appropriate to do so. Once an area for focus is agreed and named then a diagram we have referred to as a "Systems Map" is used as a way of capturing the discussion about this area.

The objective of Phase II is to explore the elements of the Systems Map in detail. Questions relating to the CATWOE elements of SSM (Smyth and Checkland 1976; Bergvall-Kåreborn et al. 2004) are posed by the analyst to encourage the expert to describe the core of each element of the map. In this way, the different parts of the map are considered as purposeful human activities which can then be modeled systemically by means of Root Definitions and Conceptual Models. These models then become the vehicles to support further detailed discussion (the process of Phase III) about the activities they contain. In this way the expert's appreciation of the domain is explored and made explicit. Of course, though exploration, discussion and reflection, the appreciative setting of both expert and analyst can be expected to change.

Over twenty years AIM has been used in different studies with different interpretations and added features depending upon its use. Overall it seems to have shown itself robust enough to offer a useful structure to help bring about discussion and formalise meaning in areas of human endeavour that rely heavily on those more subjective and tacit aspects of expertise. AIM as a process emphasises "learning about and understanding human expertise through a process of inquiry rather than trying to implement a process that extracts, elicits, acquires or mines human expertise (all popular terminology in the knowledge elicitation literature)" (West and Thomas 2005, p.431). Classical Dressage, therefore, with its strong emphasis on an ability to 'feel' (required for its practice) and to explain feeling (required for its teaching), would seem to be a suitable area in which to apply AIM.

Classical Equitation—Overview

Classical equitation involves the training and riding of horses according to principles laid down and developed by practitioners and commentators dating back from the time of Xenophon (c. 430–c. 350 BC) to the current day. Over the centuries different individuals and countries have developed their practice according to their interpretation of the notion of 'classical' and to their experimentation which, in itself, may have been influenced by many different factors such as local breeds of horse, political and personal environments, and more recently, the prizes of competition. We might argue that this situation has led to the presence of 'flavours' of classical riding which, although they may differ in their execution, are all, in theory, based upon the same general principles of 'classical equitation' (e.g. Laurioux and Henry 2009). At the risk of offending some parts of the existing riding establishments, classical equitation has been defined as the *right* way to train and ride horses. By *right*, commentators seem to have meant 'biomechanically correct' and 'psychologically ethical' for the horse (e.g. de Kunffy 1993; Belasik 1993). Classical equitation has been argued to be of benefit for both the horse and rider and at times this has created tensions between those who are involved in riding as a competitive sport and those who feel sport has perhaps encouraged unethical and indefensible breeding, riding and training practices (e.g. Heuschmann 2006; Karl 2008; McLean and McGreevy 2010; McGreevy et al. 2010). Such arguments are particularly relevant at the current time on account of media coverage of the controversial practice of 'rollkur', a training technique used primarily by dressage riders and trainers in the competition environment and which

has caused heated debate, on-going in some form or another, for close on twenty years (Belasik 1993; Loch 2010). However, within the classical tradition, arguments about 'right' and 'wrong' methods have been voiced for much longer, one of the most well-known being the controversy between the supporters of Baucher and the Conte d'Aure in nineteenth century France (Nelson 1992, pp. 7–11). Such arguments, rather than being seen as merely causing schisms, can be viewed as valuable opportunities to challenge and promote the thinking and practice of classical riders and commentators.

The classical equitation tradition has often been regarded as 'old fashioned' and irrelevant to the modern equestrian world but it seems to be witnessing a renaissance as some riders and trainers are returning to what has often been referred to as the 'academic' approach to riding. Those choosing to follow the 'classical tradition' understand that riding takes a life-time to learn, there are no 'quick fixes' and the *journey*, as opposed to the end result, is the purpose for engaging in the activity (hence the conflict with competitive riding with its measurement via 'tests' and corresponding scores).

In some parts of Europe, especially those which have not had a preoccupation with hunting, jumping and racing, the classical approach to equitation is particularly strong. The continuation of the use of the horse as a working animal together with a tradition of riding as an art form, seems to have helped maintain this link with the classical tradition (e.g. in France, Spain, Portugal). Portugal has a long history of classical equitation, with King D. Duarte's work of 1438 being one of the earliest treatises we have on classical riding. The country still has a Ministry of Culture-supported School of Equestrian Art, in addition to a military academy, that teaches students according to 'classical' principles. Since the earliest times of classical equitation, the Iberian horse has been one of the most coveted breed of horse for any serious horse-master on account of both his temperament and physique. Consequently, Portugal, like Spain, contains many horse breeders and practitioners of the art of classical equitation and has a long and rich cultural tradition of Classical Dressage that has been passed down through the generations. What takes place today in Portugal seems to have evolved out of several different purposes of riding: from warfare, courtly entertainment, tauromachy and practical animal husbandry (Belasik 1999; Cordeiro 2005). Researching the field of classical equitation, and in particular, Classical Dressage (the development of horse and rider to fulfil notional ideals of an art form as opposed to fulfilling functional or utilitarian requirements), suggests that much of the Portuguese art of Classical Dressage is embedded in individuals who practise and pass on their art through teaching but who do not necessarily record their knowledge. Consequently, such knowledge appears to be relatively fragile. This paper reports on a study which attempts to elicit, explore and record the context and meaning of the principles of Classical Dressage of an active, current, Portuguese 'classical' rider and trainer.

Classical Equitation—Existing Recorded Knowledge as Opposed to that Held by the 'Knowledge Guardian'

There are many texts written about classical equitation but few academic articles can be found on the subject. Some texts have been published that attempt to explain the historical development of Classical Dressage (e.g. Loch 1990), and some attempt to compare and contrast different approaches to riding, including an evaluation of the 'classical' approaches of different trainers although this has been in a somewhat superficial manner but entirely appropriate to a non-academic audience (e.g. Wilson 2004). Most other texts focus on providing what might be seen as 'instruction manuals' (e.g. Kottas-Heldenberg 2010),

individual Classical Equitation 'celebrities'' version of how to practise classical equitation (e.g. de Kunffy 2002), a few offer fascinating insights into personal journeys and some critical reflection of the personal development of their authors (e.g. Belasik 1997; Loch 1997; Mairinger 1983). There are even a couple of texts that seemingly set out to engage the classical equitation community in debate and conflict (e.g. Karl 2008; van Schaik 1989)., However, there is little evidence of the type of academic treatment we might expect from other disciplines and few attempts to inspect opinion and to consider its implications and relationships with the opinions of others. One exception is Belasik (2009) who reports some work undertaken in collaboration with Dr H. Clayton from the McPhail Equine Performance Center at Michigan State University. Their work investigates whether the classical principle of 'collection' can be proved scientifically through the application of computer-based technology (e.g. the use of rein tension sensors, high speed cameras, force plates and analysis software). Some academic papers relating to classical equitation are now appearing in a relatively new field of Equine Science but these focus mainly on applying scientific method to aspects of horse management and equitation. Surveys to gather views of current practice are another developing approach (e.g. Warren-Smith and McGreevy 2008) and learning theory seems to be the accepted and popular way of opening widows into understanding the reasons for practice (e.g. McGreevy 2007; Goodwin et al. 2009).

The Collaborators: Their Backgrounds and Interests

The work reported in this paper is the result of collaboration between the two authors. To allow them to be referred to during the paper and to 'speak' from their respective positions they will be referred to by their initials and/or the roles they take in the study (i.e. researcher–collaborator and researcher-practitioner).

The academic researcher–collaborator (DW) has been involved in Information Systems research since 1987. Her interest lies in appreciative inquiry, eliciting human expertise and the consideration and design of technology in order to serve some desired, stated purpose. Alongside this interest is her conviction that those 'inside' situations are the ones who have the best chance to understand their own contexts and, consequently, she is an advocate of responsible participation as a fundamental requirement of any information system design process. Having a clear understanding, or appreciation, of one's context is not a 'given'; it may take considerable work to be in a position to know or express this appreciation. Without expression this appreciation 'stays inside'—valuable but hidden to others and open to misrepresentation through the need to post-rationalise when asked to explain decision making and action arising out of this appreciation.

DW has been interested in classical equitation for more than 10 years and a pupil of D. Francisco de Bragança since 2005. Drawn to the classical approach by a fascination with the theoretical underpinning of the concepts and principles involved as much as by the beauty of a 'classically' trained horse and rider partnership, DW began to understand, through early research in the subject, that classical equitation is not just about riding horses but just as much about the rider themselves, their character, philosophy, judgments and action. These intuitive ideas about what classical equitation concerns itself with (and how it differentiates from riding horses in general) have been substantiated from immersion in the literature, by her investigation into the legacy of old and modern masters of classical equitation (e.g. Baucher (originally published in 1851 but see Nelson 1992), Belasik (e.g. 1997), Bourgelat (originally published in 1754, reprint 2010), Cavendish (originally published in 1743, reprinted 2000), de Bragança (2005), de Kunffy (e.g. 2002), de la Guérinière (originally

published in 1733 but reprinted 1994), de Pluvinel (originally published in 1626 but reprinted 1989); Duarte 1438; Fillis (originally published in 1902 reprinted in 2005), Henriquet (e.g. 2004), Kottas-Heldenberg (2010), L'Hotte (originally published in 1905 but see Nelson 1997), Loch (e.g. 2000), Mairinger (1983), Oliveira (e.g. 1988), Pembroke (originally published in 1761, reprinted 2010), Podhajsky (e.g. 1991), Racinet (2009), Seunig, (1958), Stanier (2005), van Schaik (1986), von Neindorff (2009), Wynmalen (1953), Zettle (2007)). DW's interest in Portuguese Classical Dressage came from watching riders in Portugal, and from travelling there to try and learn something of this art.

The practitioner/researcher (FdB) has been practising Classical Dressage, and breeding and schooling Lusitano horses (a type of Iberian horse) for over 30 years. He began riding from the age of 5 under the tutorage of his father D. Carlos de Bragança. From 1974 he lived and worked with Mestre David Ribeiro Telles (Miguelvian 2008), whose family continue to this day to demonstrate classical principles in the bullring. In 1980 he began 3 years of training with the late, great Mestre Nuno Oliveira at Avessada. From 1984 onwards he spent ten years working with the breeder of Lusitano horses, Cunha e Carmo. From 1994 he spent two and a half years as Head Instructor at Quinta de Sanguinheira, returning to his home farm, Quinta do Archino, in 2003. Since this time he has been breeding and training horses as well as teaching riders from all over the world, both on his own schoolmaster horses at home, and in clinics in USA, UK, Germany, France, Switzerland, Sweden, Brazil and Spain. He is passionate about conserving classical principles for the benefit of all horses and riders. He is the nephew of D. Diogo de Bragança (Lafões), VIII Marques de Marialva, acknowledged Portuguese classical riding Mestre and respected author on the subject (de Bragança 2005, 2007).

Process of the Study

The collaboration reported in this study came about as a result of numerous discussions over several years about the meaning, practice and teaching of Classical Dressage. These discussions led to the focused attempt to use AIM to see if we could start to explain and structure FdB's perspective of Classical Dressage. The following discussion will show, hopefully, that as the study progressed, the complexity of the subject, its parts and their relationships, started to unfold. The models to be discussed here were developed around three face-to-face sessions each lasting several hours with much model building and iteration in between the three sessions by the researcher–collaborator. It is difficult to present research of this type in a way which allows the reader to gain a clear understanding of both the process of the research and the lessons that are gained along the way. The shaded sections below represent an attempt to make comments 'aside' as the process of the study unfolds. These comments may take the form of reflections, justifications, or attempts to contextualise the discussion.

Session 1: Establishing the Context

The first formal meeting in June 2010 at Quinta do Archino established some difficult and abstract concepts. This was the result of asking questions of FdB that related to the future development of a Root Definition. The process was started by presenting him with a central element to be discussed, namely "Classical Equitation". He suggested we change this to 'Classical Dressage' since this is the language and terminology he uses to describe his field of practice. The change was made and all future discussion of the domain researched will now use this term in preference to the term 'classical equitation' used previously.

Reflection: The discussion that took place regarding the appropriate terminology to be used resulted in the suggestion that Classical Dressage can be considered as a subset of Classical Equitation and is one which places particular interest in the 'art' form of the activity.

FdB spent some time describing his understanding of the development of Classical Dressage in Portugal, explaining how war was the primary motivator for having a well-schooled and manoeuvrable horse: one's life may have depended upon it. However, when there was no longer a necessity for war horses, the emphasis changed towards schooling horses for the sake of 'art'. Then comes the development of riding skill as part of the art of nobility and chivalry—the art that developed into what today we refer to as 'dressage'. Alongside this avenue of development was that of the working horse, the partner in managing the herd and, out of this, the expression of skill and mastery in partnership in the bullring (tauromachy). It seems the boundaries of these three areas are not clear-cut.

Reflection and contextualisation: It would seem to be an oversimplification to talk as if there are three separate development strings—in King Duarte's treatise on horsemanship from the fifteenth century it is clear that he is talking about horsemanship to fulfil different purposes—he talks about the art of riding in all saddles (different saddles were used to help the rider sit to meet different riding requirements depending upon the purpose, whether it be knightly combat (jousting and the games or exhibition of skill to entertain and impress), serious war, or the working of cattle).

FdB then continued to explain the 'movements' associated with Classical Dressage, that is those exercises practised and drilled by the trainer to develop the horse so as to demonstrate his horse's athleticism and obedience and the horseman's prowess and skill. These movements form the basis of many manuals of horsemanship from ancient times to present day and may be seen as the techniques by which the training or 'dressing' of the horse is achieved. These include such things as voltes (riding small well formed circles correctly), shoulder-in, renvers, travers, half-pass, turn-on-the-haunch, pirouette, counter-canter and so on. The language is precise and has been passed down for generations. Then come ideas of collection, and lightness and a whole range of expressions to explain desired outcomes from the training. We get confusing ideas of straightness being the ultimate aim of the dressage master but training for straightness by a seeming fascination with 'bend'.

Context: Discussions about these issues, techniques, and the meaning behind the expressions are endless; they fill many books across the centuries, describing their conception, purpose, development and with different masters interpreting and explaining them to their own pupils. The tools of Classical Dressage are old—there is little new in terms of the tools used—the masters of the past experimented extensively, argued, presented their findings and courted public and royal patronage. Schools and academies, public and private, were founded and disappeared according to political and economic situations, as well as personal circumstances and trends. And this dynamic situation continues to this day. For example, (i) the Portuguese School of Equestrian Art was re-founded in 1981 after being disbanded in the late nineteenth century due, in part, to the country's political upheavals; (ii) British interest in Classical Dressage is currently being revived due to the efforts and influences of advocates such as Sylvia Loch and FEI Dressage Judge Stephen Clarke; (iii) the 'home' of Classical Dressage, the Spanish Riding School of Vienna (SRS) is in an interesting position as its current business-oriented directors attempt to grow its commercial practices to counteract large financial deficits of recent years (Gürtler and Klissenbauer 2011). At the time of writing,

supporters of the SRS are being petitioned worldwide via social media networks to fight against the Austrian Government's plans for cuts in funding to the SRS.

Whilst the above discussion of the history and development of ideas and practice was interesting and provided the collaborators with an opportunity to 'settle into the subject', it was not the main purpose of the study. The discussion is included here since it is how our conversation started and it seems useful to provide the reader with some ideas of the complex historical, technical, political and economical context of the subject. However, the purpose of the study was to try and make explicit FdB's personal understanding, appreciation and belief about the purpose of Classical Dressage (i.e. what is it to him, as a practitioner, a teacher and a guardian of the knowledge of the art of Classical Dressage passed down over the centuries?). To try and address these questions the discussion became more abstract as the conversation moved away from historical 'fact' and the practical explanation of technique and method towards an exploration of what underlies, motivates and causes the traditions of the practice to continue.

In previous AIM studies (as described above) it has been usual for a Systems Map to be produced to capture the early discussion and to start structuring the domain. In this instance although DW had intended to use the Systems Map as a means of promoting and recording the discussion, in practice this did not happen. The practitioner–collaborator did not appear to be comfortable with the constraints imposed by the diagram's convention although he did 'doodle' to help illustrate some of the concepts he discussed.

Justification: In a previous study (West and Thomas 2005) the practitioner–collaborator had suggested that the researcher–collaborator should draw the systems map as she spoke. The researcher had agreed to this as she was unfamiliar with the concepts and language being used; the context was unfamiliar and drawing the systems map enabled her to concentrate on the topic and to question the structure thoroughly. In the current study, DW did not attempt to impose the systems map convention on the situation since it seemed to her that this might stifle the richness and flow of the conversation which was already quite difficult on account of the collaborators not sharing a first language.

Session 1: Working Towards a Model of Purposeful Human Activity

DW posed questions, calling upon concepts from systems modelling to structure the conversation. Questions relating to the overall process and purpose of Classical Dressage were introduced into the discussion and an attempt made to record the explanations. Sometimes these explanations were multiple as many different words, terms, expressions, (in different languages), metaphors, actions, were used by FdB to try and explain his view of this world and also by DW to check her understanding: a long process. To offer some background and explanation of the systems process involved, the components of CAT-WOE (the building blocks of a useful Root Definition) were used as the basis for helping to find enough explanations of the 'system' that could be taken to be Classical Dressage. After this face-to-face discussion DW spent considerable time (numerous sessions over a two month period) building these ideas and their expression into a Root Definition. This Root Definition (Root Definition, version 1 below) is offered as a representation of the purposeful activity that FdB engages in when schooling his horses and pupils. It is important to emphasise that the system represented in the Root Definition is notional in the sense that it has been derived out of our collaborative work. As such it represents FdB's attempt to describe his understanding of Classical Dressage as prompted by DW's use of

AIM. This notional system is also formed by DW's interpretation and re-construction of her understanding, given the modelling medium and the discussion between the two collaborators, at a particular point in time.

The Root Definition derived by DW away from the meeting is presented below:
Root definition (version 1)

A rider owned, instigated and directed system to bring about perfect connection in the horse-rider circular relationship through the practice of Classical Dressage. The perfect connections are sought so as to bring enjoyment and the experience of brilliance and harmony to the rider to the extent that the result is like a special, personal secret between the context of the current possible character and philosophy and potential resistances on the part of both horse and rider. The system's activities must not in any way destroy the horse's natural movements.

The Root Definition was then used to model the workings of the notional system specified therein into the form of a Conceptual Model. The Conceptual Model is not reproduced here so as to save space since it was superseded at the next meeting. Again, this modelling was undertaken by DW outside of the meeting.

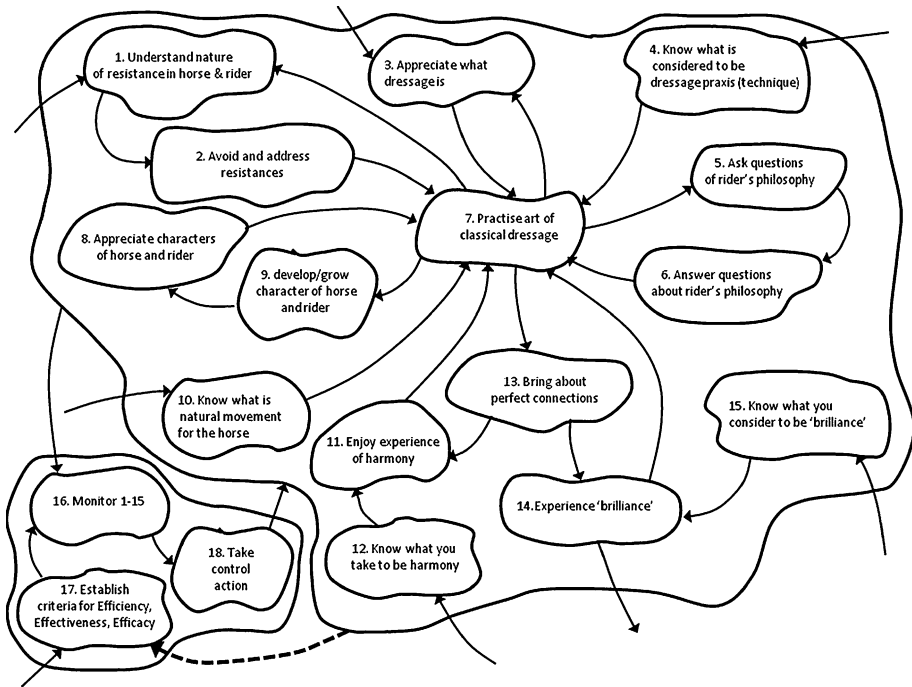Session 2: Checking the Root Definition is Representative of Understanding

The Root Definition and corresponding Conceptual Model were taken back to FdB for the next stage of the discussion in August 2010 at Quinta do Archino. DW explained how she had developed the models, the process involved, and how her aim had been to try and capture her interpretation and understanding of FdB's meaning in the previous discussion. Talking through the models revealed an alternative interpretation involving the order of the development of experience. In systems terms this altered the structure of the models and involved rethinking the processes and their relationship—by default it also led to a deeper probing of the transformation brought about by the system and its purpose. Adjustments 'in rough' were made to the original Root Definition and Conceptual Model although the re-written models, prepared 'in neat' after the second meeting, are presented below (Root Definition version 2 and Fig. 2: Conceptual model).

Root Definition (version 2):

A rider owned, instigated and directed system for the purpose of experiencing brilliance by bringing about perfect connections in the horse-rider circular relationship through the practice of Classical Dressage. The experience of 'brilliance' and attainment of harmony brings about enjoyment to the rider to the extent that the result is like a special, personal secret between two parties. The outcome of the system is sought within the context of the current possible philosophy of the rider and the character and potential resistances on the part of both horse and rider. The system's activities must not in any way destroy the horse's natural movement.

Session 2: Using the Conceptual Model to Structure Deeper Discussion

Once the new structure and order had been identified and changes made to the Root Definition and corresponding Conceptual Model (see Fig. 2) the discussion into the parts of the notional system began. As with previous AIM studies, the Conceptual Model was converted into an agenda for the next meeting. Table 1 below presents the agenda and

Fig. 2 Conceptual model (version 2) relating to Root Definition version 2 given above

Table 1 Table recording discussion surrounding the elements of the conceptual model

Conceptual model activity	Comment
1. Understand nature of resistance in horse and rider	Fight; resistance can come from both horse and rider; horse more sensitive; rider follows horse to begin, then horse follows rider as he begins to understand
2. Avoid and address resistances	Step by step; if you destroy the natural movement of the horse you lose the heart and get a fight
3. Know what dressage is	Classical—the past is foundation; nothing new in dressage; past gives the future; dressage is an art, millions of details—the more details you have the more you have the heart of dressage
4. Know what is considered to be dressage praxis (technique)	Lateral movements: shoulder-in—'mother of dressage', circle, track, volte…
	See (Elainevalente 2010)
5. Ask questions of rider's philosophy	The more questions posed in practice (i.e. facing difficulties to be overcome) that the rider can answer for himself—is challenging rider to develop philosophy—approach to riding/life
6. Answer questions about rider's philosophy	Personal, experiment, try to overcome problems faced in riding practice; learn through trying out different possibilities by making mistakes; learn how to tackle difficulties next time, on different horses
	Philosophy is important to harmony; knowledge of oneself is very important

Table 1 continued

Conceptual model activity	Comment
7. Practise art of Classical Dressage	No 7 'practice art of Classical Dressage'—important link between horse and rider—this is where the circular relationship meets/ joins. But nature of link is active for rider and passive for horse? What is meant by 'practice'—engage in? Decision-making by rider. 'Follow together'?
8. Appreciate characters of horse and rider	Character of animal = more constant; character of man = less constant because intelligent
	Character = personality—knowing me and myself, myself and me, to know oneself—very important part of harmony
9. Develop/grow character of horse and rider	Can teach a horse 'character'; teacher needs to understand student's philosophy, character, and feeling. Mental, fresh, cool-headed, humble (relationship with horse and people - not subservient; accept lots of ideas and pick out what you think is best), kind, generous, 'ensemble', la tête fraîche, gentile, 'faire la selection'
10. Know what is natural movement for the horse	'Natural' comes from where there is no resistance; watch how horse moves at liberty; when rider puts horse in correct position and the natural movement can happen
11. Enjoy experience of harmony	"pas-de-deux"
12. Know what you take to be harmony	Harmony = character and philosophy of horse and rider—brings about perfect connection; harmony comes about when you finish making mistakes
	No posture—no harmony; soft movement; secret between 2— horse and rider
13. Bring about perfect connections	Between horse and rider, rider and horse; When you get moments of 'following together' then you achieve 'perfect connections' and then you experience brilliance and harmony; 'Follow together, not follow behind'; like when dancing the tango
14. Experience brilliance	Music for horse and rider, pleasure
15. Know what you consider to be brilliance	Some kind of benchmark that you use as inspiration; motivation, e.g. See Fxbigo (2009)
	Compare rider with the 'master'—this is really the ultimate aim, harmony → perfect → brilliance. With feeling and understanding. The best always moves away from you; man never realizes (achieves) the end of things
16. Monitor 1-15	Rely on feeling to show if not meeting good level; horses give feedback—they tell if something is good or not so good
17. Establish criteria for Efficiency, Effectiveness, Efficacy	Difficult—the systems activities are constantly changing. But criteria are constant—depend upon one's notions of what constitutes: harmony, perfection, brilliance.
18. Take control action	Rider thinks maybe horse can give more; try to change bad for good but when you think horse is available for change, then you cross the next step—so it is important to see the change is possible out of harmony
	Millions of mistakes, learn from these to go forward. More practice, more feelings, more mistakes, change

FdB's comments and explanations of the different areas covered relating to the Conceptual Model and Root Definition. The 'comments' are DW's record of the discussion using FdB's language and examples wherever possible.

Session 3: Checking and Validating Interpretation

The third session took place at Quinta do Archino in June 2011. The purpose of the session was to check DWs interpretation and review the lessons reported below. The discussion resulted in some additional comments being added to Table 1 as the validation process highlighted some gaps and provided additional explanation.
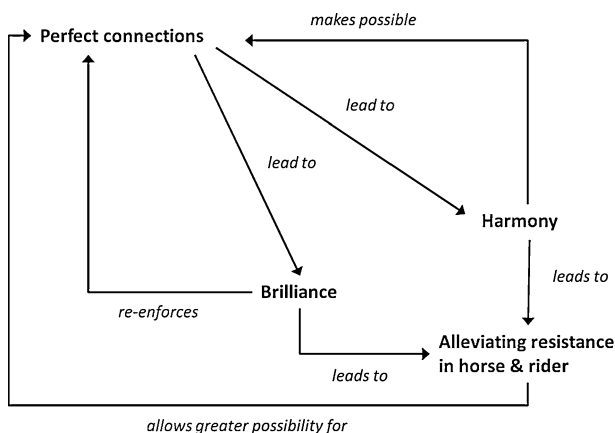
Interpretation and Learning

About Classical Dressage

After the second meeting DW reflected on the discussion of the Conceptual Model activities and it seemed that looking at some of the 'links' in the process modeled could help to explain some of the most important aspects of Classical Dressage. The following discussion relating to these links of activity are DW's attempt to draw out fundamental aspects of the knowledge guardian's perspective.

Links between activities 11, 13, 14, 1, 2 and 7: after the second session DW considered the altered Root Definition, trying to make sense of the difference between the first and second expressions of purpose and the associated implications. With reflection and further discussion with FdB it appears that the change reflects an important defense of the notion of purpose: the systems inquiry process would seem to have helped focus upon and pinpoint the very heart of the matter. The link between 14 and 7 is necessary to explain the continued motivation to engage in Classical Dressage. Figure 3 highlights the three main components of the system, namely, the idea of experiencing: (i) perfect connections (ii) harmony and (iii) brilliance, and their relationship to each other. It also explains how, as these areas improve, then the constraints, the resistances expressed and exercised by horse and rider, are alleviated.

Links between activities 1, 2 and 7: the concept of 'resistance' here should be taken in the widest sense. It can be a mental or physical barrier to action due to inflexibility (of mind or body). As practice becomes easier and more relaxed then 'resistances' become less. As soon as there is a relaxation then more can be achieved, often with less effort than

Fig. 3 Diagram to explain the link between perfect connections, brilliance and harmony

was being spent previously which in itself caused resistance (e.g. through tension, use of force, desire to succeed, nervousness).

Links between activities 7, 9 and 8: the discipline and need for active listening on the part of the rider helps train and form the character of the rider. This is closely linked with the 'philosophy developing' loop in that it develops patience, quietness, also boldness, courage and caution - all aspects that will be drawn into play and question in Classical Dressage. Recognizing these characteristics and being able to 'grow' them beneficially is a significant part of the learning system and the development of reflective practice.

Links between activities 7, 5 and 6: this is the *big* personal journey; these connected activities emphasise how we might start with a particular outlook on life, namely, how we see the world, how we frame it and make sense of it. This represents our ontology and epistemology at any one point in time. The cycle here indicates the role of Classical Dressage in challenging ourselves, taking us further in questioning our own attitudes, reactions and our ability to react and learn: to adapt according to what we think and feel.

Link from the operational system to activity 17: this dotted arrow emphasizes that FdB constantly reassesses his own performance given his own critical evaluation of his practice and experience; his criteria for judging his success are generated by him as a result of his synthesis of theory and practice.

Links between activities 3 and 7: the link from 3 to 7 and back to 3 helps to explain the learning expressed by the rider/trainer who may start practicing Classical Dressage with a basic understanding and then, as a result of all the different processes, learns their way forward to a better, richer appreciation of the meaning of dressage.

About Language

An important issue in this study was the problem and excitement of language. FdB speaks English well and Portuguese and French as a natural speaker. DW speaks English and gets by reading French as long as it concerns Classical Dressage, with its specific vocabulary. The negotiation required to transmit meaning was not simple. Sometimes French proved to be far more appropriate a vehicle to capture meaning. This may not translate too well to the reader since they are unlikely to be aware of the connotations of the terminology. Much of the language we use today in dressage is derived from the French and so the language fits the subject. There are often no direct translations from the French to the English. For example we talk about 'breaking' a horse, a fairly brutal image of the process of accustoming a horse to being ridden. This terminology also has connotations of a fight that is relatively short and brusque, about domination and a once-and-for-all process. Alternatively, we talk about 'schooling' but once again this can have connotations of a rather oppressive nature. By comparison the French talk about 'débourrage' which is the progressive schooling and education, or 'bringing up', of the horse, both mentally and physically, which takes places over a fairly long time—years as opposed to days, weeks, or months. The word 'dressage' comes from the idea of 'dressing' the horse. This has connotations of 'civilizing', introducing more 'clothing', careful preparation and a much longer time frame within which the horse learns to be the adult, valued, individual member of the horse/rider partnership. The difference implied by the two different languages appears enormous at times and could be seen to represent the different ways in which the study and practice of horsemanship has progressed in various parts of Europe.

The French word 'écuyer' is another example of a problem of language. We do not have a clear and direct translation in English: 'rider' is not appropriate since it tends to be used

to refer to anyone who can sit on a horse. By comparison, 'écuyer' is a master horseman: a thinking rider.

An important lesson is that the outcome of our study to date is set within the confines of our language and our attempts to find ways to convey meaning. Sometimes because of this the expression may seem a little clumsy but this clumsiness has not been 'cleaned up' for academic publication. This difficulty with expression is part of our story; the expression of our understanding may improve as our appreciation of each part of the whole develops. However, it may be that as we struggle less to communicate and understand each other we begin to assume a shared meaning and, therefore, fail to question our understanding and interpretation. In this study, struggling to understand the language used seems to have played an important part in gaining a deeper appreciation of the subject being explored.

For the Researcher–Collaborator (DW)

For the researcher–collaborator an important output of the study is an increased understanding of one knowledge guardian's appreciative setting regarding Classical Dressage. However, the main task for the researcher–collaborator was that of facilitating the elicitation process, making sense of what had been said and interpreting the outcome of the discussion. The researcher–collaborator recognised that her prior understanding of the topic may have interpreted, distorted or created connections and explanations which served to put words into the mouth of the practitioner–collaborator (FdB). At times she found herself following a path and asking questions in areas barely touched on in the previous discussions. At such times she was able to stop and redirect the elicitation process according to the structure of AIM. Her interest in reflective practice has surely influenced the way in which she interprets and presents the story above, as has her reading about Classical Dressage and her following of the journeys of other researchers and students of the art of Classical Dressage. When trying to develop the Root Definition and Conceptual Model it was difficult to keep using the practitioner-collaborator's ideas and words and it was not long before she was drawing a Root Definition and corresponding Conceptual Model that was not about 'perfect connections' but about 'reflective practice'. This is a clear example of how she was working with her own thoughts and preoccupations and mixing these with the practitioner-collaborator's ideas: her interpretations and questions were becoming overpowering. On recognizing this she was able to stop and refocus on the words FdB had used and she had recorded. However, the new insights about reflective practice that the modeling exercise gave her have been recorded elsewhere and are considered as a valuable by-product of the study; they serve as a practical example of how her appreciation of Classical Dressage developed during the study.

For the Practitioner–Collaborator (FdB)

For the practitioner–collaborator an important output of the study has been the inspection of his own appreciation of the subject and an exploration of the way in which this personal, embedded knowledge may be made explicit to aid in its transfer to students. The motivation for collaboration has been the interest in the process itself (to see if we could describe the parts of the complex whole) and the desire to explain and pass on his knowledge and passion about Classical Dressage. By making these ideas, beliefs, and practices explicit they become available for challenging, re-thinking, and arguing. As such it is recognised that it is generous of any expert to agree to make these very personal thoughts and beliefs explicit and thereby set themselves open to attack, challenge or worry about the professional implications (i.e. the concern that "if you tell what you do, others

disagree"). This is not the purpose here and it is hoped that those reading this will take this in the spirit in which is it meant—the presentation of these personal beliefs are to try and record the current state of the art in practice by this one person, not to lay down rules, to express a personal method or to criticise others. There is a recognition that personal knowledge and expertise builds upon the teachings of others by the acts of interpretation, experimentation and finding out for oneself. This work does not represent the presentation of a 'new method' for commercial exploitation, but a generous sharing of valuable knowledge which is being built up during a lifetime.

About AIM

At the outset of the study the researcher–collaborator was concerned that the approach would either be too restrictive or that its reliance on language as its modeling medium would make this study (with no shared first language) impossible. The usual concerns about how much control over the study it would either allow or force the researcher–collaborator to take were interesting. Once into the study, the systems models provided a valuable and defensible structure to open up the topic for debate and probe meaning and understanding in a way which would have been hard to achieve without the domain-independent inquiry method. The exercise has allowed us to communicate in detail about a subject that is difficult to discuss because of the language, the subjective nature of the topic and complex web of interrelationships involved. Certainly, the discussion could have taken place without AIM but it would have been very difficult to hold it together and to offer the level of detailed analysis and discussion we have illustrated here (i.e. it has allowed us to identify, consider and reflect upon the nature and implications of the relationships between 'perfect connections', 'brilliance' and 'harmony').

The study highlights one particular component of AIM, used with good effect in most other AIM studies, that seemed to be inappropriate in this case. The Systems Map, has always been the most easily used part of the approach in previous studies (i.e. West and Stansfield 1999; Stansfield et al. 2009) and there has been a danger that users of AIM have 'backed off' from using the more complex but probing modelling that Root Definitions and Conceptual Models provide in favour of merely using the Systems Map. In this particular study the Systems Map proved to be an inappropriate vehicle for documenting the expert's thoughts. It may be that this was due to the issue of language: perhaps the practitioner–collaborator was uncomfortable communicating 'in writing' in a language which he used mainly in a spoken form when teaching. On reflection there may have been another contributing factor, namely that the researcher–collaborator knew enough about the subject area (from her own studies and from working with the practitioner–collaborator for 6 years) to be comfortable to 'jump' to the next phase of AIM. Experience from the study suggests it can be difficult to work with the type of structuring that the conventions of the Systems Map impose for very practical reasons (i.e. language). This study seems to show that as the researcher–collaborator gains in experience and confidence in the overall process, it matters less if the elicitation process omits the Systems Map. The key thing is for the discussion at this early stage to be sufficient to support the structured systems investigation that follows and the researcher–collaborator should be able to facilitate this process in any suitable manner. However, the absence of a Systems Map meant that away from the session the researcher–collaborator had less structured material to work with and, therefore, needed to rely on her notes taken during the session and her memory of the discussion. This is an area where memory, previous knowledge and knowledge/understanding that was emerging as a result of the current study became difficult to separate.

Summary, Conclusions, and Emerging Themes

This paper has reported a study which can be summarised and conclusion drawn from it in two main areas:

The Application (and 'Testing') of an Interpretive Systems-Based KE Method (AIM)

In the study reported above AIM has been applied to an area of human expertise that takes a lifetime to learn, that is based within a rich historical and culture setting, and which is based heavily on concepts of 'feel'. AIM seems to have been robust enough to enable this study to have taken place and valuable results about the area of expertise have been gained. The study has also raised some issues about AIM itself, such as the problem of language, and the use of the 'traditional' first phase of the method—the Systems Map. The insight into Classical Dressage given by adopting a systemic approach has given an indication of the potential benefit of undertaking a wider systems-based study into equitation per se. This would seem to offer a valuable alternative and complimentary academic picture of the discipline to the one that has been presented over the last few years which takes a scientific approach by applying 'learning theory' and harnessing computer-based technology to assess horse and rider performance.

Elicitation and Recording of a Knowledge Guardian's Expertise—a Description of Classical Dressage

The paper has presented a study undertaken to elicit and record the expertise of what has been referred to as a 'knowledge guardian'. A knowledge guardian has been described as an individual who holds expertise that has been passed down through generations and who continues to develop, practice, protect and pass on this knowledge to interested pupils. The knowledge guardian in this study is a Portuguese rider and trainer of Classical Dressage and his expertise is embedded within a rich historical and cultural context.

Tensions and conflict of opinions in modern competitive dressage have helped to increase interest in the Classical tradition of equitation and so it is seems appropriate to try and understand what Classical Dressage is about. By undertaking the above study is seems that the reasons for practising the art of Classical Dressage (to experience brilliance, from out of perfect connections through harmony) may not fit comfortably with the demands and raison d'être of the competitive sport. Further research into the views of other practitioners of both Classical Dressage and competitive dressage will, hopefully, give a greater understanding of this apparent chasm between the classical 'ideal' of the art of dressage and the current practice of dressage as a sport.

The relationship between Classical Dressage and competitive sport is interesting and merits further research. Particularly valuable would seem to be further investigation into the idea of Classical Dressage as being as much about the psychological development of the rider as it is about the development of equestrian skill. For example, the Conceptual Model in Fig. 2 above illustrates the importance of the development of the rider's own philosophy, and how it develops as new challenges are faced and overcome through the practice of Classical Dressage. The personal desire to experience 'brilliance' provides the personal motivation, not the promise of material rewards. Pereira (2001), commenting on the Portuguese King D. Duarte's fifteenth century treatise, explains: "En écrivant son traité d'équitation…, Dom Duarte, Roi du Portugal et de l'Algarve, Seigneur de Céuta, a signé la première page de L'Histoire de la psychologie appliquée aux sports équestres et

vraisemblablement de la pédagogie du sport en général." (p47). It is hoped that it will be possible to develop the study reported here in a direction to enable us to focus more on these areas of sports pedagogy and psychology, as well as developing a set of systems descriptions of the art of Classical Dressage.

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