



**Historical European Martial Art  
a crossroad between academic research,  
martial heritage re-creation  
and martial sport practices**

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**Abstract – Historical European martial arts (HEMA) have to be considered an important part of our common European cultural heritage. Studies within this field of research have the potential to enlighten the puzzle posed by past societies, for example in the field of history, history of science and technology, or fields related to material culture.**

The military aspects of history are still to be considered among the most popular themes of modern times, generating huge public interest. In the last few decades, serious HEMA study groups have started appearing all over the world – focusing on re-creating a lost martial art. The terminology “Historical European Martial Arts” therefore also refers to modern-day practices of ancient martial arts. Many of these groups focus on a “hands-on” approach, thus bringing practical experience and observation to enlighten their interpretation of the source material. However, most of the time, they do not establish inquiries based on scientific research, nor do they follow methodologies that allow for a critical analysis of the findings or observations.

This paper will therefore propose and discuss, ideas on how to bridge the gap between enthusiasts and scholars; since their embodied knowledge, acquired by practice, is of tremendous value for scientific inquiries and scientific experimentation. It will also address HEMA practices in the context of modern day acceptance of experimental (or experiential) processes and their value for research purposes and restoration of an historical praxis. The goal is therefore to sketch relevant methodological and theoretical elements, suitable for a multidisciplinary approach, to HEMA, where the “H” for “historical” matters.

**Keywords – Historical European Martial Arts (HEMA); Martial sport; Martial arts; History; Archaeology; Middle Ages; Renaissance; Early Modern Period; Material culture; Embodied knowledge.**

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## I. INTRODUCTION

Historical European Martial Arts (HEMA) – or Western Martial Arts (WMA)<sup>1</sup> – has lately become the accepted terminology to refer to modern-day practices of ancient martial arts, based on scientific analyses or amateur interpretations of historical sources.

HEMA studies might, on paper, sound like niche research that is only of interest to a few specialised researchers and enthusiasts. HEMA studies do however have great potential to enlighten the puzzle posed by past societies, for example in the field of history,<sup>2</sup> in history of science and technology,<sup>3</sup> or fields related to material culture.<sup>4</sup> The first step toward a broader recognition from other related fields of research is, however, conformity to academic writing and research standards, including scientific methodology and serious contextual analysis of both the objects of research and results. It then becomes clear that European martial art should be considered an important part of our common European cultural heritage.

The “H” for “Historical” in HEMA implies that practices are based on the study of source material. The main source for its study is considered to be the technical literature dedicated to martial practices (Fight Books)<sup>5</sup>. To this should be added the study of iconographical sources, normative and narrative literature, material culture including arms and armour, etc., but perhaps most importantly: a clear understanding of the

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<sup>1</sup> Mainly used in United States of America, to differ from Asian Martial Arts. In this case, it is not strictly a synonym, but would also include more traditional sports such as French *Savate* or *Jogo de Pau* for example.

<sup>2</sup> As shown by Sydney Anglo, *The Martial Arts of Renaissance Europe* (New Haven: Yale University Press, 2000); or more lately by B. Ann Tlusty, *The Martial Ethic in Early Modern Germany: Civic Duty and the Right of Arms* (Basingstoke: Palgrave, 2011).

<sup>3</sup> See for example Jan-Dirk Müller’s work (1992, 1994) or forthcoming Daniel Jaquet, *Le geste, le mot et l’image: La mise par écrit de l’art du combat à la fin du Moyen Âge, De Diversis Artibus* (Turnhout: Brepols, forthcoming).

<sup>4</sup> See for example Tilman Wanke, ‘Anderthalbhänder – Zweihänder – Langes Schwert zu Klassifikation, Nutzung und Bezeichnung der großen Schwerter des Spätmittelalters und der Frühen Neuzeit’, *Zeitschrift für historische Waffen- und Kostümkunde*, 51/2 (2009) or Fabrice Cognot, *L’armement Médiéval: Les armes blanches dans les collections bourguignonnes. Xe – XVe siècles* (unpubl. diss., University of Paris 1, 2013), <<http://www.theses.fr/2013PA010609>> [accessed 30 December 2014].

<sup>5</sup> Although it is also understood that the reconstruction, or at least a reconstructive approach of fighting arts for times and cultural eras in which this literature was non-existent can still be approached using secondary source material such as iconography, literary sources, archaeological findings, etc. See for instance Anthony F. Harding, ‘Sword, Shields and Scholars: Bronze Age Warfare, Past and Present’, in *Experiment and design: archaeological studies in honour of John Coles*, ed. by id. (Oxford; Oakville: Oxbow Books, 1999), pp. 87–93; Barry Molloy, ed., *The Cutting Edge: Studies in Ancient and Medieval Combat* (Stroud: Tempus, 2007) and Éric Teyssier, and Brice Lopez, *Gladiateurs – Des sources à l’expérimentation* (Paris: Éditions Errance, 2005).

historical context represented by the source material, including a formal typology proposing to solve first hand issues about analyses of the chosen source material.

This paper will address some of the whys and wherefores regarding HEMA modern-day practices and research processes, in the context of current acceptance of experimental (or experiential, see below 3.1) processes and their value for research purposes. The first part shall point out crucial facts and methodological elements important to definition and work with source material, as well as the potential of inquiries dealing with embodied knowledge<sup>6</sup> and material culture for the understanding of past societies. The second part aims to sketch relevant methodological elements according to the multidisciplinary approach of HEMA, discussing some of the weak points regarding material replicas, overall approach, and pitfalls observed in commonly accepted practices in the communities of practitioners.

## I.1. Background

Since the early 1990s communities of practitioners have grown internationally and since the 2000s scientific and amateur publications have appeared, slowly shaping a field of research. The latter stems from pioneer works on Fight Books from the 1960s, but traditionally with no or few considerations to the practical side of the content.<sup>7</sup> Previous attempts at revival – restoration – recreation<sup>8</sup> have shown interest from enthusiasts, collectors, martial artists, and even professional soldiers and instructors since the turn of the 19<sup>th</sup> c.<sup>9</sup> Also noteworthy is the involvement of a general audience from within

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<sup>6</sup> As understood by Shogo Tanaka: “Embodied knowledge is a type of knowledge where the body knows how to act. A simple and general example is riding a bicycle. Most of us know how to ride a bicycle, and we are able to do it without any deliberation. There is no need to verbalize or represent in the mind all the procedures required. The knowledge seems to be imprinted in one’s body. The knowing-subject here is the body itself, not the mind. Or more precisely, it is the mind-body.” Shogo Tanaka, “The Notion of Embodied Knowledge”, in: *Theoretical Psychology: Global Transformations and Challenges*, ed. by Paul Stenner, John Cromby, Johanna Motzkau, Jeffrey Yen, and Haoscheng Ye (Ontario: Captus University Press, 2011), pp. 149–57, cit. p. 149.

<sup>7</sup> For historiographical discussions see the paper of Sixt Wetzler, ‘Überlegungen Zur Europäischen Fechtkunst’, in *Das Duell – Ehrenkämpfe vom Mittelalter bis zur Moderne*, ed. by Ulrike Ludwig, Barbara Krug-Richter, and Gerd Schwerhoff (Konstanz: UVK Verlagsgesellschaft, 2012), pp. 60–75. For short discussion about the quality of non-academic publications, see Sergio Boffa, *Les Manuels de Combat (‘Fechtbücher’ et ‘Ringbücher’)*, Typologie des sources du Moyen Âge occidental, fasc. 87 (Turnhout: Brepols, 2014), pp. 63–70.

<sup>8</sup> For academic definition of re-enactment in the field of history, see the historiographical review in Vanessa Agnew, ‘History’s Affective Turn: Historical Reenactment and Its Work in the Present’, *Rethinking History*, 11 (2007), 299–312. For a more sociological approach connected with HEMA studies and analyse of the distinction of restoration – revival, see Audrey Tuailon Demésy, *La Recréation du passé : enjeux identitaires et mémoriels, Approche socio-anthropologique de l’histoire vivante médiévale* (Besançon: Presses Univ. Franche-Comté, 2013).

<sup>9</sup> Joshua Pendragon, ‘Masters, Fencers and Collectors: George Silver’s Paradoxes of Defence and the Lost Fencing Library of Arsène Vigeant’, in *The Noble Art of the Sword: Fashion and Fencing in*

communities of re-enactment since the 1960s, which do not follow the same objectives nor methods as HEMA practitioners, but who re-enact daily life with a strong interest in militaria aspects. Stage fighters, HEMA practitioners, re-enactors and even some scholars do play with swords, but they certainly do not aim to achieve the same thing or practice according to the same patterns or methodologies as one another.

HEMA studies have perhaps not always received the attention they deserve, but in the last few decades, serious practical HEMA researchers and study groups have started to appear all over the world. Such groups usually focus on a “hands-on” approach, thus bringing practical experience and observation to enlighten their interpretation of the source material. Unfortunately their research and results are usually not accessible or published on stable media. They are diffused through workshops or lectures at HEMA events, at best through electronic, self-publishing initiatives (blog posts, forum threads or videos) intended for the community of practitioners, not for scientific research or a general audience.<sup>10</sup> Some of these groups are experimenting and gathering data, willing to be part of the research, or at least the advancement of knowledge building. However, most of the time, they do not establish inquiries based on scientific research, nor do they follow methodologies that allow for a critical analysis of the findings or observations; nor do they publish their results on stable and open media. A scholar therefore, sadly cannot consider these initiatives as valuable research to be taken into account.

On the one hand, actual restoration of historical bodily knowledge remains an unreachable goal, mostly because of the lack of sources to evaluate it, but also because of the distance and nature of our 21<sup>st</sup> c. societies (diet, corporality, sensorimotor knowledge, social habits and ideas<sup>11</sup>). On the other hand, practitioners that have worked with the subject for many years, have gathered extensive practical experience, bridging the gap of the diachronic reading of a medieval source and the sensorimotor knowledge required to understand it. This is where scholars and HEMA practitioners must meet, especially if the inquiries include experimentation of bodily knowledge or handling of weaponry. The purpose of this article is therefore not to point out “what is right or wrong” or argue toward best practices, but instead to point out specific elements, contextual challenges and modern misconceptions, which from a professional historical

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*Renaissance Europe 1520–1630*, ed. by Tobias Capwell (London: Paul Holberton Publishing, 2012), pp. 237–44.

<sup>10</sup> Of course there are exceptions. Some scholars have published proceedings of conferences or collective books or monographs, but usually with a low diffusion rate. Some of them mentioned in Boffa, *Les Manuels de Combat*. In this regard, emerging collection or editing houses must also be mentioned: Freelance Academy Press, VS-Book (collection “Bibliothek der historischen Kampfkünste”) and *Acta Periodica Duellatorum*.

<sup>11</sup> Even if recent trends have argued in favour of the concept of “historicizing the body”, see the review in Roy Porter, ‘History of the Body Reconsidered’, in *New perspectives on historical writing*, ed. by Peter Burke (Polity: Cambridge Univ. Press, 2001), pp. 232–60.

or archaeological point of view, can distance people's research on – or practical understanding from – the historical context they are trying to analyse, interpret or experience.

## **I.2. Intended Audiences**

It is crucial to part amateurish initiative from academic research, if one strives to shape a recognised field of research.<sup>12</sup> However, at the same time, it is also crucial to recognise the value of the experience gathered by HEMA practitioners and to bridge the gap between them and scholars, since their embodied knowledge, acquired by practice, is of tremendous value for scientific inquiries and scientific experimentation. Cooperation between academics and enthusiasts should be encouraged, provided that both sides understand each other's needs and best practices. This paper, written by a historian, a museum curator and an independent scholar (archaeologist) – who are also HEMA practitioners – proposes a criteria outline that could be used by academic researchers to consider modern day HEMA practices and research as valuable for scientific inquiries. At the same time, the authors hope that it will be considered as food for thought for the practitioners that foremost strive to restore historical European martial arts – not merely following the trends of a new martial sport. It is our intention to bring to light some of the pitfalls, lead by conscious and unconscious choices, that have the potential of ruining such praiseworthy intentions and goals.

## **II. HOW DID THEY FIGHT? SCIENTIFIC INQUIRIES, METHOD AND THEORY**

Academic research is defined, and would thus differ from simple knowledge building (gathering of data and observation with a critical perspective), as being based on specific methodology. Some basic criteria can be outlined: The research is based on an inquiry (being inductive or deductive); is driven by the gathering of data (previous research and primary sources); hypotheses are formulated and tested or confronted with primary sources; and the results are observed, criticised, and lead to either the approval, or dismissal, of the hypotheses.

Methods are adapted to the discipline, the source material, and the field of research. Inquiries based on gestures as elements of a bodily knowledge are connected to both an historical context and its material culture. The existence of a technical literature dedicated to the specific bodily knowledge is not mandatory for the latter to be an object of research. It is possible to inquire about a gesture from the Palaeolithic period, based on analyses of archaeological findings<sup>13</sup>. Likewise, inquiring about modern day parkour practices (holistic training discipline using body movement to get from A to B

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<sup>12</sup> See Daniel Jaquet, 'Sword and pen: Sword and pen. Historical European Martial Arts studies, the communities and the academic world', *Acta Periodica Duellatorum*, 4 [in preparation].

<sup>13</sup> Traceology, archaeometallurgy, paleotraumatology, etc.

in the most efficient way) from first hand video by practitioners, diffused on YouTube, is also achievable.<sup>14</sup> Then, methods depend mostly on the source material type and its limits for analysis (tacit knowledge – i.e. what is not available from source material, but essential for its understanding).<sup>15</sup>

Below are briefly reviewed core elements about the main source for HEMA studies (Fight Books), necessary steps towards contextualisation of gestural inquiries, based on such sources, and the associated material culture (mainly weapons and clothing).

## II.1. Fight Books; trustworthy sources?

For the purpose of this paper, we shall here focus on one common denominator of HEMA research: the Fight Books, being considered as primary sources describing, fixing, or encoding personal martial techniques. They are to be considered “primary” in the sense of being more trusted sources than narrative description or pictorial representation of a martial gesture, because they are believed to be authored by martial knowledge possessors, and intended for practitioners.<sup>16</sup> However, considering all these sources as being a unified corpus, representative of actual practices and put in writing according to a didactic purpose, is the first common mistake. The corpus of Fight Books’ is currently under scientific investigation and is recognised as being highly heterogeneous. Therefore, because of its nature as pragmatic literature, it is necessary, for each source, to question its representative value, its modus of redaction and its reception. Each of these sources must be, beforehand, carefully studied, including prosopographical research on its author(s) (i.e. research on the author as a person or as a figure), proper codicological description of the material support (i.e. detailed study of the material component of the book), philological and/or iconological tradition of the text (i.e. comparative analysis of text/images throughout the known witnesses and their relations) and the context of its reception (see below 3.2). As such, most of the sources in the corpus have yet to be studied in detail<sup>17</sup>.

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<sup>14</sup> Neil Archer, ‘Virtual Poaching and Altered Space: Reading Parkour in French Visual Culture’, *Modern & Contemporary France*, 18 (2010), pp. 93–107.

<sup>15</sup> For analyses dedicated to Fight Books using the concept of Tacit Knowledge (Polianski), see Eric Burkart, ‘Die Aufzeichnung des Nicht-Sagbaren. Annäherung an die kommunikative Funktion der Bilder in den Fechtbüchern des Hans Talhofer’, *Das Mittelalter*, 19 (2014), 253–301.

<sup>16</sup> See definition and historiographical review discussed in Jaquet, *Le geste, le mot et l’image*.

<sup>17</sup> There is a tendency in HEMA practitioners’ communities to make disputable shortcuts, referring either to out-of-date scholarship or simply following unfounded mainstreams. One example out of many can be shortly mentioned: The first witness recording the Liechtenauer teachings is usually attributed to Hanko Dobringer, where actually the miscellany Ms 3227a (Nürnberg, Germanisches Nationalmuseum) is anonymous and possibly misdated. See Eric Burkart, ‘The Autograph of an Erudite Martial Artist: A Close Reading of Nuremberg, Germanisches Nationalmuseum, Hs. 3227a’, in *The Late Medieval and early Modern Fightbooks*, ed. by Daniel Jaquet, Karin Verelst and Timothy Dawson (Leyden: Brill, forthcoming).

### 2.1.1 Standards

Another crucial step in making the material available for study is the edition phase. A scientific edition of a source would include all the above mentioned studies, a precise transcription with added material from the philological tradition, a technical glossary, and possibly a translation.<sup>18</sup> Most of the manuscripts of the corpus are today transcribed – mostly by amateurs – and published on the Internet.<sup>19</sup> As a result, most of this material is available, but not trustworthy according to academic standards (which is sad, by the way, because a considerable part is of high quality, only lacking the more formal side of things). For the researcher, unable to work from a transcription of the original language, or the practitioner, lacking the linguistic skills, translations are available. Not only is the saying “*traduttore, traditore*” very meaningful, but such pragmatic literature with its unstandardised technical lexis is especially difficult to translate. Any translation process is subjective and translation of technical words or concepts adds its lot of abstraction.

Even if the question of the context of the application of a gesture, its material culture, and the sensorimotor knowledge of the interpreter, is set aside (see below, 3.1), most interpretations proposed by a trained martial artist, based on those sources, are disputable. Firstly, because they are based on unstandardised – sometime erroneous – transcription, even badly translated source material, but most importantly, because it is not based on a scientific inquiry, but driven by the will to transpose the written, or pictured gesture, into living and efficient practical outcomes.

Lastly, as outlined by the paper of Sergio Boffa. The project of restoration of a martial gesture from a written or pictorial technical description is highly questionable, mainly because of the nature of the source – its limit for embodied knowledge transmission and the lack of sensorimotor knowledge of the modern day reader. It is therefore, of uttermost importance that each of those interpretations be humbly considered as a disputable hypothesis.

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<sup>18</sup> The number of good editions according to academic standards and including the stated elements is increasing. Good models would include works like: Rainer Welle, ... *vnd mit der rechten faust ein mordstück. Baumanns Fecht- und Ringkampfhandschrift: Edition und Kommentierung der anonymen Fecht- und Ringkampfhandschrift* (München: Herbert Utz, 2014) ; Hans Czynner, *Würgegriff und Mordschlag: Die Fecht- und Ringlehre des Hans Czynner (1538): Universitätsbibliothek Graz, Ms. 963*, ed. by Ute Bergner and Johannes Giessauf (Graz: Akademische Druck- u. Verlagsanstalt, 2006) or Matthias Johannes Bauer, ed., *Langes Schwert und Schweinespiess: Die anonyme Fechthandschrift aus den verschütteten Beständen des Historischen Archivs der Stadt Köln* (Graz: Akademische Druck- u. Verlagsanstalt, 2009).

<sup>19</sup> See the wiki-based initiative of Michael Chidester, *Wiktenauer* (<<http://wiktenauer.com/wiki/>> [accessed December 10, 2014]), which gathers contributions (transcription and translation) from researchers all over the world.

## II.2. Behind the Scenes – Analysing the Overall Context

After pointing out that technical knowledge was (and still is) usually passed down through apprenticeship systems, Steven A. Walton, a scholar in the field of History of Science and Technology concerned with knowledge transmission and pragmatic literacy, states:

The craft treatises, which survive then, can only represent a small fraction of the vast craft tradition, and that they were ever written down at all should give us pause to consider by whom and for what purpose.<sup>20</sup>

Fight books are not to be considered didactic manuals (in the modern sense of the word), which one can open, read, and learn from. The extant manuscripts, prints, or pictorial sources do not just represent a number of specific fighting techniques, but also a wide range of social relations, inscribed in specific mentalities, obeying to unspoken norms and codes, which can greatly affect modern researchers' interpretation of what is shown or described. HEMA studies should therefore include a detailed contextual analysis, with the purpose of forming a foundation for solid hypotheses and interpretations. Of course, such analysis is to be counted among the most difficult aspects of HEMA studies. It can be incredibly comprehensive and thus also a big time waster, compared to the more practical aspects of HEMA. At the same time, it also requires a historical insight that goes beyond what most practitioners possess, or even have the interest to possess. However, even the slightest misunderstanding can end up with disastrous consequences concerning interpretation and understanding of the source material, especially when following tendencies for comparative analysis that drive willingly toward content outside of its context.<sup>21</sup> There is, therefore, virtually no end to the number of critical questions, which must be answered, prior to the phase in which the researcher begins to formulate hypotheses and interpretations.

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<sup>20</sup> Steven A. Walton, 'Proto-Scientific Revolution or Cookbook Science? Early Gunnery Manuals in the Craft Treatise Tradition', in *Craft treatises and handbooks. The dissemination of technical knowledge in the Middle Ages*, ed. by Ricardo Cordoba, *De Diversis Artibus*, 91 (Turnhout: Brepols, 2013), p. 221. This point would also be outlined by scholars concerned with bodily knowledge pragmatic literacy, see for example: Rebekka von Mallinckrodt, ed., *Bewegtes Leben. Körpertechniken in der Frühen Neuzeit*, Ausstellungskataloge der Herzog-August-Bibliothek (Wolfenbüttel: Herzog-August-Bibliothek, 2008), pp. 1–14.

<sup>21</sup> Examples of these pitfalls can be easily found in many languages from authors intending to develop methods of fighting based on various source material. Out of a long list: Wolfgang Abart, *Lebendige Schwertkunst: Bloßfechten mit dem Schwert und der Feder* (Mainz: Zabern, 2008); John Clements, *Medieval Swordsmanship: Illustrated Methods and Techniques* (Boulder: Paladin Press, 1998); Olivier Patrouix-Gracia, *Traité de combat médiéval: Méthode catalane* (Noisy-sur-École: Budo Editions, 2006); etc.



Following are examples of the intricate issues, which are crucial to address in HEMA studies:

- a) Authorial project: What do we know about the author (authors)? What was the meaning of the displayed/described material? Are the techniques for use on the battlefield(?), in a duel, for general self-defence or as part of a sports related context? Was the purpose to kill or not?
- b) Intended audience: Are we certain we've determined the source material's original intended audience? It can, especially for the older source material, be extremely difficult to determine to "whom", the material originally was aimed, especially if the philological tradition was not investigated. Was it originally intended for use within the nobility, bourgeoisie or for mercenaries / soldiers? And, as importantly, for which context of application? The question is closely related to the aforementioned social development, social related rules and traditions, which in many ways can affect modern interpretations of the source material.
- c) Context of application: For which context of application were the described techniques intended? HEMA has throughout history been part of a constant evolution where practice, tradition, weapons/armour, and their use, were constantly evolving and changing. In general, this means that it can be difficult to compare sources where the dating is decades or centuries apart. This is not even a discussion of timing, since contemporary, yet distinct, regional forms of combat can be identified, even in the same geographical area.<sup>22</sup> Different forms of interpersonal violence have long been discussed, usually divided by a dichotomy, seen by historians, between those that are "to the bitter end" and more "playful" forms.<sup>23</sup> However, it might also be worth looking at the subject as being two sides of the same coin – as can also be traced in source material.<sup>24</sup>

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<sup>22</sup> For a discussion on such see: Claus Sørensen, 'Et semiddelalderligt tysk fægtemesterhåndskrift på Det Kongelige Bibliotek. Ms. 290 2º', *Fund og Forskning i Det Kongelige Biblioteks Samling*, 50/1 (2011), 159–189.

<sup>23</sup> For a review of this dichotomy in secondary literature and the consequence in modern discourse, see Jaquet, Daniel, 'Personne ne laisse volontiers son honneur être tranché? Les combats singuliers 'judiciaires' d'après les livres de combat', in *Armes et jeux militaires dans l'imaginaire (XIIe-XVe siècles)*, ed. by Catlina Girbea (Paris : Classiques Garnier, forthcoming). See also: Sørensen, 'Et semiddelalderligt tysk fægtemesterhåndskrift', pp. 175–176.

<sup>24</sup> See, for example, the short discussion on *Schimpf* und *Ernst* from Hans Lecküchner's Fight Book in Daniel Jaquet, 'Fighting in the Fightschools Late 15c., Early 16c.', *Acta Periodica Duellatorum*, 1 (2013), 47–66. This is based on the larger discussion found in Rainer Welle, '...und wisse das alle höbischeit kompt von deme Ringen': *Der Ringkampf als adelige Kunst im 15. und 16. Jahrhundert: Eine sozialhistorische und bewegungsbiographische Interpretation aufgrund der Handschriftlichen und gedruckten Ringlehren des Spätmittelalters* (Pfaffenweiler: Centaurus-Verlagsgesellschaft, 1993).

These intricate questions based on a very heterogeneous corpus of sources would demand the establishment of a typology. This matter is currently debated in academic publications and has not yet found common ground.<sup>25</sup> There are many challenges in creating an accurate typology as the purpose, audience, and context of various Fight Books may appear similar but with proper review may be found to, in fact, be quite different from one another. An example would be the preserved medieval German fencing manuscripts, which are often wrongly described as belonging to the same tradition and lineage because they share some easily identifiable characteristics. Yet, when properly analysed, are found to be quite distinct from one another. This kind of amateur association can lead to disastrous conclusions.<sup>26</sup>

### II.3. Material Culture

It is essential (also for the later practical part of HEMA related activities), that all previous context related study is conducted as thoroughly and accurately as possible. To this should be added an analysis of material culture, where relevant objects and their chronology, typology, production, characteristics, and properties, are analysed. It is not possible to review all possible issues here, although below we shall discuss weapons, shoes and clothing as examples.

For the common HEMA practitioner, who is not affiliated with an institution (university or museum), it can often be difficult to obtain practical knowledge of historical weapons, armour, clothes, shoes, etc. A general rule applies here: the older the objects are, the harder they are to gain access to. Because it is one thing to see the objects; it's a completely different thing to handle them. Thankfully it should be added, that more and more museums are now willing to invite enthusiasts "behind the scenes" and into their collections. However one thing is not going to change: the historical objects are of such great cultural value, and several of them in such a fragile condition, that they do not allow much on such visits, besides careful holding and measurement taking. In pure euphoria after having held a 600-year-old sword, it is easy to forget that there is a big difference between "holding a sword" and "handling a sword". However, after such visits there is sadly no shortage of people who suddenly can comment on how stiff a sword is and how it behaves when it is swung through the air – although the reality was probably somewhat different when they visited the collection / museum. This can unfortunately often lead to bad choices, both conscious and unconscious, when it comes to the immensely important selection of representative weapon-simulators during the practical part of research. In other words, when making an inquiry about Historical Martial Arts based on a definite source, the weapon simulator used for

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<sup>25</sup> See the brief discussion about typology by Boffa, *Les Manuels de Combat*. For a review of attempts on categorizing or establishing a typology see Jaquet, *Le geste, le mot et l'image*.

<sup>26</sup> For an example of problematic authorial attribution, see Daniel Jaquet and Bartłomiej Walczak, 'Lignitzer, Hundsfeld or Lew? The question of authorship of popular Medieval fighting instructions', *Acta Periodica Duellatorum*, 2 (2014), 105–48.

experimentation must correspond in mechanical behaviour to an original representative of both the audience of the book and the context of application. For example, it is questionable to observe people enacting Fiore dei Liberi's teachings dating from the beginning of the 15th c. with weapon simulators corresponding to the early 16th c (see below 3.2.1).

For obvious reasons, it is disputable to perform dancing gestures from late 17th c., based on similar technical literature, without wearing period shoes or corseted waist-constructed clothing. Likewise, it is questionable to perform martial gestures based on Fight Book analysis without the matching period clothing. With period clothing – as with weapon simulators – we insist that more than simply the visual aspect be replicated. In fact, the visual qualities are not relevant for scientific inquiries about gesture, as they would be for matters of cultural mediation in a museum context. The mechanical behaviour and ergonomic quality of the clothing and shoes, especially its impact on body mechanics (movement limitation, ground adhesion, protective qualities, etc.), should be the first concern when choosing or manufacturing clothing replicas. Methods for such undertakings exist<sup>27</sup> and analyses on the impact of wearing armour, for example, have already been researched.<sup>28</sup>

### III. HEMA; SPORT, REVIVAL OR SCIENTIFIC EXPERIMENT?

The authors have witnessed endless discussion about the “purposes” of HEMA related activities, including loads of criticism about broadly diffused practices in the growing communities, especially competitive practices. Of course, the first step is to separate activities according to their primary objectives. Amongst many other possibilities, we see three main categories related with the background of the practitioners and contexts of the enactment of martial gestures: a. martial sport/art, b. safeguarding or reviving martial heritage, c. scientific experiment. It would be easier to consider these three categories as parts of the same object – in fact they are –, but it is necessary to distinguish them if one would pursue the goal of bringing these to a higher level (i.e. outside of the boundaries of local practices, attempting forms of recognition). Each of these directions is governed by institutions, or bodies (see Table 1), who differ in their

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<sup>27</sup> See the review in Yvonne M. J.Lammers-Keijsers, ‘Scientific Experiments: A Possibility? Presenting a General Cyclical Script for Experiments in Archaeology’, *euroREA*, 2 (2005), 18–24 and the discussion below under 3.2.

<sup>28</sup> Graham N. Askew, Frederico Formenti and Alberto E. Minetti, ‘Limitations Imposed by Wearing Armour on Medieval Soldier’s Locomotor Performance’, *Proceedings of the Royal Society: Biological Sciences (Proc.R.Soc.B)*, 279 (2012), 640–44 and Daniel Jaquet, Alice Bonnefoy-Mazure, Stéphane Armand, Caecilia Charbonnier, Jean-Luc Ziltener and Bengt Kayser, ‘Range of Motion and Energy Cost of Locomotion of the Late Medieval Armoured Fighter: Confronting the Medieval Technical Literature with Modern Movement Analysis’, *Plos One* (forthcoming).

goals and reasons for existence, and more importantly in their methodologies and regulations.

<b>Categories of HEMA related activities</b>	<b>Governing institutions or bodies</b>
a. Martial sport/art	Sport federations
b. Reviving/recreating martial heritage	UNESCO and national cultural departments
c. Scientific experiments and research	Universities and museums

*Table 1: Main directions or categories guiding HEMA related practices and their related governing institution, or body, on the highest level.*

Certainly, one could argue that each of these institutions or bodies should not follow a unified path, because of their differences in level (local, national, international), school of thought or existing precedents/customs. This is for the best, since diversity is a needed value in life and in studying, as well as in reviving or practicing historical European martial arts. However, some archetypes or minimal requirements can be outlined, and pitfalls pointed out, when pursuing advancements in practice within any of these categories. The purpose of this subpart is to highlight misguided approaches, from the academic point of view, within the broad practices of HEMA communities, in relation to the scientific method (3.1), the implication of the modern equipment (3.2), the sporting approach (3.3) and the public impact in context of a demonstration (3.4).

### **III.1. Experiencing or experimenting?**

As outlined in the first part, HEMA is a complicated object to research, since its essence is not found in written documents, nor in material culture. It is a lost embodied knowledge. Inquiring about such knowledge needs a highly multidisciplinary approach and a careful gathering of source material. Moreover, it is not really about books or weaponry, as argued by Barry Molloy: “The use of weaponry engages the physical body as much as (if not more than) the intellect, and it is therefore essential for us to investigate them through bodily experience.”<sup>29</sup>

We shall address below some issues related both to research matters and to public outreach when presenting HEMA to a general audience. The idea that HEMA can be related to experimental archaeology – or research in general – is something frequently encountered in the discourse of many practitioners. It should be clear that if the conditions listed above are not met – those of a rigorous, thorough approach – the notion of experimental archaeology is to be rejected, as argued by Peter J. Reynolds who asserted:

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<sup>29</sup> Barry Molloy, ed., *The Cutting Edge: Studies in Ancient and Medieval Combat* (Stroud: Tempus, 2007), p. 12.

At the outset it is a fundamental tenet that experiment has absolutely nothing to do with the exercises of “living in the past”, “dressing in period costume”, “re-enactment of past events” or, indeed, the teaching of well understood techniques – which may well have been originally established by the experimental process – like, for example lithic technology, pottery manufacture or laying mosaics. The former are at best theatre, at worst the satisfaction of character deficiencies; the latter are simple skills which, should they need to be acquired, require learning. It is extremely unfortunate that these activities have become subsumed under the overall title of experimental archaeology, since their inclusion militates against the real value of experiment and its acceptance professionally.<sup>30</sup>

Experimental archaeology is considered a somewhat recent addition to archaeology, in a broader sense, even though the interest in recreating structures and processes according to period sources or hypothesis is far older. “Classic” experimental archaeology relies heavily on a multidisciplinary approach, and expects a formal frame both in the preparation of experiments and the publication of results. But what it also implies, in this strict meaning of the term, is an absolute knowledge and control of the variables of the experiment.<sup>31</sup>

However, according to Ruth Fillery-Travis,<sup>32</sup> experimental archaeology can equally claim legitimacy in empirical approaches, following an integrated model in which it is admitted that the researcher-experimenter works within multiple frames and domains, all interconnected, that in the end contribute to a deeper, and more complex, understanding of the practices than strict hypothesis testing. Peter Kelterborn<sup>33</sup> mentions that, in the strict perspective of an archaeological experiment, a pre-requisite is what he calls “expertise”. HEMA mainly deals with embodied knowledge and, as such, creates difficulties in describing the sensorimotor aspects of that knowledge (as

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<sup>30</sup> Peter J. Reynolds, ‘The Nature of Experiment in Archaeology’, in *Experiment and design: archaeological studies in honour of John Coles*, ed. by Anthony F. Harding (Oxford; Oakville: Oxbow Books, 1999), pp. 156–62, quote p. 156.

<sup>31</sup> Alan K. Outram, ‘Introduction to Experimental Archaeology’, *World Archaeology*, 40 (2008), 1–6. To this, one can oppose an “experiential archaeology”, see Daniel Jeffrey, ‘Experiential and Experimental Archaeology with Examples in Iron Processing’, *Institute for Archaeo-Metallurgical Studies newsletter*, 24 (2004), 13–16.

<sup>32</sup> Ruth Fillery-Travis, ‘Learning and teaching in experimental archaeology’, paper presented at the 6th Experimental Archaeology Conference, York, January 7, 2012. Summary available at <<http://experimentalarchaeology.org.uk/2012/01/07/6th-experimental-archaeology-conference-abstract-ruth-fillery-travis/>> [accessed January 5, 2015].

<sup>33</sup> See his contribution based on his previous publications in: Alan K. Outram, James R. Mathieu, Martin Schmidt, Radomir Tichy and Peter Kelterborn, ‘How to Publish Experimental Archaeology?’, *euroREA*, 2 (2005), 107–122, for Kelterborn specific part, pp. 120–122.

historically mentioned in Fight Books<sup>34</sup>), to which must be added the absence of “experts” in a field that is precisely being rediscovered.<sup>35</sup> Thus, involving the researcher in the experimental or experiential process seems indeed a viable – even sometimes valuable – approach. Then again, it requires a certain amount of discipline, and is no excuse for claiming that one is doing experimental archaeology just by lifting a sword-like object. The hands-on experimentation of a theoretical hypothesis, based on the study of HEMA source material, does benefit from having a researcher well-versed in, or at least somewhat aware of, the use of his/her own body.

Furthermore, Heather M.-L. Miller mentions an “exploratory” experimental archaeology<sup>36</sup> which, being based on a long-term endeavour, cannot be forced into the frame of a definite protocol, yet is still able to provide exploitable results and elements in the building of knowledge, as well as in the betterment of observation tools. In this approach, the researcher himself/herself is evolving, as part of the process, and so is his approach to his sources, in an ascending hermeneutic spiral centred on the researcher and source as an ensemble.<sup>37</sup>

Besides, is “fighting” something slightly too complex to be measured, controlled and divided into quantifiable parameters? The mechanical properties of the weapon has little relationship with its dynamic properties when made complex by a moving arm, body, legs – so what can it be when we have not one, but *two* people fighting?

### III.1.1. The definition of “Research”

More generally, whether an experimental or experiential approach is included or not, misuse of the term “research” is also common. The Oxford Dictionary defines it as follows: “The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions”. This broad definition does not fully consider the criteria of academic research, as understood by professional scholars. To

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<sup>34</sup> As an example among others to be found in the corpus on a large timespan, the first glossator of the Liechtenauer epitome (Nurnberg, National Museum, Hs 3227a) states: “Also notice and know that one may not speak about, write about or explain the art of combat, as it can be shown and demonstrated with the hand.”, corrected English translation based on Grzegorz Zabinski, *The Longsword Teachings of Master Liechtenauer: The early sixteenth century swordsmanship comments in the ‘Goliath’ manuscript* (Torun: Wydawnictwo Adam Marsz, 2010), p. 133.

<sup>35</sup> Although the human form, in its biological and motor aspect, is rather similar for all members of the species (see Daniel Lieberman, *The Story of the Human Body: Evolution, Health, and Disease* (New York: Pantheon Books, 2013)), a possible pitfall would be to rely on ‘allogenic’ expertise, i.e. bodily knowledge coming from extant martial arts or traditions, European or not. Even if such experts do benefit from a greater knowledge of their own bodily capacities, the risk is high (for so many reasons) to see them apply principles that are directly related to their own martial education.

<sup>36</sup> Heather Margaret-Louise Miller, *Archaeological Approaches to Technology* (Amsterdam; Boston: Elsevier, 2007), pp. 34–36.

<sup>37</sup> Creutz, Kristina, *Tension and tradition : a study of late iron age spearheads around the Baltic Sea* (unpubl. diss., University of Stockholm, 2003), p. 28.

the latter, research should be based on an inquiry, leading to deduced or induced hypotheses, which would be discussed based on study of source material, previous scholarship and/or new data produced by methodological procedures. More importantly the results of the research need to be published (academic publication, usually with peer-review). However, academic research does not “belong” to professional scholars or researchers. There are loads of example of “experts” or “independent scholars” (the academic way of naming the outsiders of academia) who have produced cutting edge research or revealed ground-breaking findings outside of the academic publishing sphere. It is not about degrees, intellectual capacities or money, it is about method and diffusion of knowledge.

Playing with a sword simulator, in a modern-day outfit, with a friendly partner (or against an adversary in a competition), applying training based on interpretations, presented by a self-proclaimed (or recognized by his peer as such)<sup>38</sup> instructor, or out of a web-published translation of source material, is a common feature of HEMA practice. It is not scientific research; it may be element phases of a research project. It is not experimenting HEMA; it is experiencing HEMA. It is not restoring a documented historical martial praxis; it may be considered a reviving attempt as argued by UNESCO standards<sup>39</sup>, or more commonly named “re-creating”.

According to these observations, several misuses of the terms “researcher”<sup>40</sup> and “experimenting”<sup>41</sup> or “experimental archaeology” are to be observed in the HEMA practitioners’ communities. The authors of this paper shall advise researchers and practitioners to be careful in using these terms, especially if the below-listed elements were not taken into account in their activities:

- a) It is based on an inquiry
- b) It is led, observed and follows a methodology
- c) It produces data that can be analysed, assessed and confronted with the source material

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<sup>38</sup> Since, at the time of the writing, very few national federations possess an authority-recognized certification for instructors.

<sup>39</sup> See Unesco, Convention for the Safeguarding of the Intangible Cultural Heritage, 2003 (available at <<http://www.unesco.org/culture/ich/en/convention>> [accessed December 10, 2014]).

<sup>40</sup> See Daniel Jaquet, ‘Sword and pen. Historical European Martial Arts studies, the communities and the academic world.’, paper presented in 2015 at Dreynevent (international HEMA event), Vienna and at International Congress on Medieval Studies, Kalamzoo. To be published in *Acta Periodica Duellatorum*, 4 (forthcoming).

<sup>41</sup> Daniel Jaquet, ‘Experimenting Historical European Martial Arts, a Scientific Method?’, in *Late Medieval and Early Modern Fight Books. A Handbook*, ed. by id., Karin Verelst, and Timothy Dawson, (Leiden: Brill, forthcoming).

- d) The results are published in an open and durable platform of knowledge exchange (traceable electronic publication – with DOI – or academic paper publication)

### **III.2. Modern equipment and implication on practices**

Modern equipment developed for HEMA related activities, or taken from collateral martial sports, enables testing of techniques at different levels of strength, speed and intention. Most of these types of equipment are mainly developed to prevent injuries and/or to improve performance and competitiveness in a modern sporting context. Trying to find a balance between financial considerations, availability, quality and level of “historical authenticity”, the HEMA group leaders make choices, with compromises, to ensure the best possible equipment matching their group objectives and needs.

Having a critical attitude toward any choice of modern equipment is crucial, since it will affect practice. Any choice – conscious or unconscious – or omission of choice, has the potential danger of moving the activities further and further away from the supposed historical context where they are intended to take place. To this should be added, that as more and more alternative choices are made, one could make use of the old saying: “many creeks make a big river”. Together they create an even bigger risk of misinterpretations and false practices.

In a research context, all equipment is measured, analysed and confronted with archaeological material (or period sources) and if used in an experimental context, its impact on the test is carefully included both in the protocol and in the analyses and discussion of the results. Some of the examples examined below will illustrate that, from this point of view, some broadly used equipment and practices can no longer be considered as historically “rooted”, at best they can be considered as historically “inspired”.<sup>42</sup>

The following examples deal with weapons, clothing and shoes but in principle also apply to all other cases such as, for example, armour and accessories.

#### **III.2.1. Weapons**

More and more manufacturers are working with the old craft again and producing replicas at reasonable prices. It is thus possible to buy a sword with dimensions, weight and characteristics that are identical to historical swords and very close to reality (at least from the data available to the researcher/manufacturer). It must again be stressed that it

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<sup>42</sup> On a side note, the development of modern equipment designed for HEMA, increased by the constant search for new starter kits, inexpensive safety equipment and cheap weapon simulators, encourages exchanges between suppliers and practitioners about “historical matters”. If one combined the practically-oriented enthusiast’s vast experience of what works and what does not work, with the academic researcher’s knowledge of historical artefacts, the results could be substantially improved. This is an area where cooperation between scholars, practitioners, and suppliers could be expanded.



is important that weapon typologies and chronologies are examined in detail to avoid the use of incorrect replicas in experiments<sup>43</sup>.

With a sharpened sword replica, it is possible to do practical tests concerning the weapon's handling, cutting and thrusting properties<sup>44</sup>. Noteworthy is the difference between acquiring experience from testing with a replica, and performing experimentation out of a defined inquiry, following a strict methodology and publishing the results with a critical discussion. Amongst, broadly diffused, inert targets, used for test-cutting, should be mentioned: clay, plastic bottles filled with water and tatami mats (rolled bamboo / rice mats soaked in water). The authors of this article, however, wish to stress the importance that the test objects be as closely related to the original contexts as possible – meaning the human body.<sup>45</sup> Examples of such could include dead animals (pigs, lambs, donkeys, etc.)<sup>46</sup>, clothed in fabric representative (not only in aspect, but in

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<sup>43</sup> Research traditions, when it comes to commonly accessible publications on the subject of arms and armour, belong to the middle of the last century and are greatly in need of renewal. The problem is characterized by lack of access to big and important weapons and armour collections, in particular in Eastern Europe, where both language and politics made them inaccessible. Even in Western Europe, language barriers between the Germans, English and French have often made it impossible to make general analyses with perspectives beyond national borders. For both typology and chronology, it may therefore be difficult to determine how much regional differences come into play. For examples see: Ewart Oakeshott, *The Archaeology of Weapons. Arms and Armour from Prehistory to the Age of Chivalry* (Woodbridge/Suffolk: Boydell, 1960); Ada Bruhn-Hofmeyer, 'From Medieval Sword to Renaissance Rapier', *Gladius*, 2 (1963), 5–68; Olle Cederlöf, *Väbnenes Historie* (Stockholm: Bokforlaget Prisma, 1965) and Ewart Oakeshott, *European Weapons and Armour from the Renaissance to the Industrial Revolution* (London: Lutterworth, 1978). It is worth noting that new research has and is being done on the subject by scholars such as Fabrice Cognot and Peter Johnson. However, it still needs to be published in a proper form.

<sup>44</sup> An important observation: Replica weapons can be expensive to acquire. Once HEMA practitioners have gotten hold of a brand new sharp weapon, it's often perceived as an extremely valuable object. It might, at most, be used to cut through plastic bottles or tatami mats, but then the limit is also set. From a research point of view, it's not good enough! The weapon must be recognized as a tool with the one purpose of increasing our understanding of what we are really eager to know about: how the weapon functioned and what it could do. Otherwise there is no difference between the newly acquired sword and the 600 year old sword you were graciously allowed to hold at the museum – you are filled with awe, but far from handling it!

<sup>45</sup> Professional research centres do provide methods and material to achieve this goal. Examples of such can be found in tests performed at the laboratory of the Institute of Forensic Medicine (University of Bern) by Christine Cooper, *Forensisch-anthropologische und traumatologische Untersuchungen an den menschlichen Skeletten aus der spätmittelalterlichen Schlacht von Dornach (1499 n. Chr.)* (unpubl. diss., Universität Mainz, 2010), pp. 112–137 <<http://ubm.opus.hbz-nrw.de/volltexte/2011/2419/>> [accessed 4 March 2011].

<sup>46</sup> Warzecha, Roland, 'Mit Hieb Und Stich, Über Die Handhabung von Schwertern.', in *Mittelalterliche Kampfweisen, Bd. 3: Scheibendolch und Stechschild*, ed. by André Schulze (Mainz: Ph. von Zabern, 2007), pp. 55–61.

mechanical proprieties connected with weaving techniques) of the historical period such as wool, linen, cotton, etc. and in different thicknesses, layers and clothing construction techniques in relation with the context. To this should be incorporated elements, which originally were designed to hinder the effectiveness of weapons such as protective clothing, armour etc. With a sword from the early Middle Ages it is much harder to thrust through mail than with a late medieval sword (often with reinforced tip) that goes through it like a knife through butter.<sup>47</sup> At the same time there is a big difference between “how well” a sword cuts through clothes, skin, flesh and bone – depending on how thick the different parts are, where the sword hits, the force put in the thrusting action, and, more importantly, the angle of attack and the resistance posed by a standing opponent (rarely mounted on a vice...). A place with a good thickness of skin, meat and fat, and far from the bone, requires a significantly more forceful and clean-sliding cut than a wrist, elbow, shoulder, etc., where the target area is harder.<sup>48</sup>

Another topic should also be mentioned: How do sharp and pointy weapons behave when they hit each other? Is it even possible to experiment with such and is it legal to do so? One quickly realises that there is a great difference in how sharp weapons behave, compared to blunt simulators, when they hit each other. The researcher is now heading into a research area that is dangerous, but also, depending on many factors, can be downright irresponsible. Nevertheless, it should be stressed how important it is to examine such aspects of HEMA, but with extreme caution.<sup>49</sup> This part of the research is not something that in any way should be taken lightly and certainly not openly broadcast without disclaimers, before displaying such practices as a model for HEMA practitioners. A given country’s laws / legislation (if it exists), and insurance issues, should be examined if one wishes to undertake such experiments.

Of course, it is necessary to make choices that allow some form of practical use without HEMA practitioners killing each other. This is particularly true in relation to

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<sup>47</sup> Reference discussed in Matthias Tryggedsson, ‘Middelalderens sværdbrug – eksperimentelle forsøg’, in *Anno Domini* (Aarhus: Middelalderarkæologisk Forum, forthcoming 2015).

<sup>48</sup> For discussions concerning experimental research, swords and their effectiveness see: Tryggedsson, ‘Middelalderens sværdbrug...’ and Olivier Gourdon, ‘La pratique de la coupe : un apport à l’étude et à l’interprétation des arts martiaux historiques européens’, in *Expérimenter le maniement des armes à la fin du Moyen Âge*, ed. by Daniel Jaquet and Nicolas Baptiste (Revue d’Histoire Suisse, forthcoming 2015).

<sup>49</sup> As a minimum, the practitioner should have several years of experience. In addition, his/her “partner” should have extensive practical experience with the weapon (and simulators), so that all uncertainties are minimized. Another idea for minimizing risk worth mentioning: rounding the tip but keeping the blade sharp. The tip is perhaps the most dangerous part of the weapon when it comes to unforeseen happenings. It is often easier to control the blade’s movement, power, and direction, thus minimizing risk with the edge.

competitive and free-play<sup>50</sup> aspects of HEMA. The general solution has become blunt steel sword simulators. Wooden swords, nylon / plastic swords and shinai (Japanese sword simulator made of bamboo<sup>51</sup>) should also be mentioned.

Common issues related to simulator choice for HEMA related practices are listed below:

- a) Swords whose appearance and features are not representative of the time period and the source material being analysed. An example is the difference between a longsword from the 14th c., equipped with a conventional crossbar, opposite a longsword from the 16th c., which may have additional hand protection in the form of metal rings, etc. The latter can have an influence on the handling properties of the object, but also on the behaviour of the wielder.<sup>52</sup>
- b) Swords whose length is not representative of the time period and the source material being analysed. An example could be modern sword simulators with a length of up to 20–30 cm longer than known originals of a given period.
- c) Swords whose weight is not representative of the time period and the source material being analysed. An example could be swords much lighter than known originals, whose dynamic properties (what in common language is known as “balance”) do not match known examples of the period and heavily affect, for example, their handling speed and the weapon’s force of impact<sup>53</sup>

### III.2.2. Shoes, clothing and protective equipment

As for the weapon simulator choice, clothing and shoes must be of prime concern for researchers and to a lesser extent to HEMA group leaders. The latter must be at least aware of the consequences of these choices. Wearing sport shoes with good grip on an adherent gym floor will allow for the development of amazing explosive strength when attacking or evading, but, at the same time, will shift the motor skills required and the advantages provided away from the medieval context of leather soles on grass or hard natural ground.

The same applies to the concept of level ground. Nowadays we do not consider our paved roads, pavements and squares something special – but one must remember that

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<sup>50</sup> Common term in martial arts or sports to refer to agonistic exchanges (commonly named “sparring”, where the partners can oppose each other, demonstrating their martial skills in an environment defined by rules or norms).

<sup>51</sup> Although the use of the latter has dropped significantly thanks to other options (steel) now available.

<sup>52</sup> The evidence and links between visual aspects and features of swords – such as shape and dimension of the crossguard – and the evolution of fighting has for instance been put forward by Cognot, *L’armement medieval...*, pp. 298–328

<sup>53</sup> Ibidem, p. 116.

such things were not common until recent times. The same applies to sport halls and grounds which are favoured by HEMA practitioners for their activities.<sup>54</sup>

The issue of footing (and shoes) is not only important for the modern HEMA researcher – it was also important for one of the best known fencing masters of all time, the Italian Salvator Fabris. He alludes to the problem of practicing in a *salle* (training hall) compared to where the real fighting often would take place: in the streets. In his fight book from 1606 it is stated:

The reason for this is that a foot cannot be moved in less than two tempi: one to lift it and the other to put it back on the ground. Some, to get around this shortcoming, slide the foot forward without lifting it: this may easily be performed in the *salle*, but in the street would cause you to stumble on one of the many impediments. Thus it is better to always lift it carefully, making sure that nothing will trip you up.<sup>55</sup>

Wearing a fencing mask will prevent face and head injuries if protection for the back of the head is added. However, the practitioner so protected will rely less on his technical skills (weapon-handling or evasive manoeuvres), since it is (almost) perfectly safe to get hit. The same would apply for hand protection. It is now common to observe over-protected practitioners bashing at each other in a “safe” way, with unsatisfactory outcomes (unavoidable double-hits<sup>56</sup>). The counterpart can also be seen with practitioners fighting with steel weapon simulators without protection, significantly raising the risk of injury. The authors do not want to enter in the debate about best practices – hotly discussed on web-based platforms – but would outline that the common denominator of HEMA practices is currently unarmoured longsword fighting<sup>57</sup> (*Blossfechten*). Consideration about context of application (self-defense, playful context, normative duels, proto sportive context, etc.) set aside, none of the Fight Books display fighters with protective equipment; instead they are pictured wearing civil clothing only. Conversely, civil clothing does not mean modern shorts and t-shirt, but hose and doublet for medieval Fight Books, for example. Scholars in the field of period

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<sup>54</sup> As a hypothetical comparison one might imagine the following: If someone desired to recreate early historical cycling, most people would probably right away see the difference between the old stiff tires of leather / wood compared to modern-day tires of rubber and how they would affect speed and grip, for example. This would be particularly notable when compared on the surface one races on nowadays: modern day asphalt. If we also add the nowadays much lighter bicycles, it will also have a huge effect on our speed and how effectively the bicycle behaves when put to the test.

<sup>55</sup> Tomasso Leoni, *The art of Dueling. Salvator Fabri's rapier fencing treatise of 1606* (Union City: Chivalry Bookshelf 2005), p. 7.

<sup>56</sup> Situation where both partners (free-play or training context) or adversary (competitive context) end up being hit.

<sup>57</sup> The art of combat is generally divided in three sections for the late medieval and early modern period: without armour, with armour and on horseback. See Boffa, *Les Manuels de Combat*.

clothing – and knowledgeable readers – may certainly know about solidity and mechanical properties provided by proper construction techniques and fabrics in such clothing and thus would understand the significant difference these choices make.<sup>58</sup>

### III.3. Pressure testing, tournament and sparring – a platform for combat sports

The modern HEMA practitioner will probably recognize that their activities are an ideal platform for sports and competitive practices with the potential for creating strong communities. HEMA must/should thus be embracing, instead of being exclusionary, to all. It is therefore also much more common to hear about HEMA groups practicing as a martial sport or a martial art than as actual study/research groups. To this must be added, that the classification of HEMA related practices as “sports”<sup>59</sup> imply pragmatic issues when it comes to administrative recognition (insurance, permits, public operating subsidies, wages, public accessibility, training hall, etc.).

Despite all arguments from opponents to the “sporting” side of HEMA, practices observed at international gatherings or competitions include elements that allow us to classify such activities as a martial sport.<sup>60</sup> There is however no point in seeing a dichotomy between a martial sport and a martial art.<sup>61</sup> In modern days, as in history – at

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<sup>58</sup> For an introduction oriented towards HEMA practices, see Gregory Meleand Allen, Nicole, *The Book of Historic Fashion: A Newcomer's guide to Medieval Clothing (1300–1450)* (Wheaton: Freelance Academy Press, 2014). For a more scholarly approach, we recommend the long established academic journals: *Costume: The Journal of the Costume Society* (Maney Publishing, 1956-) and *Waffen- und Kostümkunde: Zeitschrift für Waffen- und Kleidungsgeschichte* (1897-)

<sup>59</sup> The word is of course polysemic and loaded with historically specific meanings. As stated above, the governing bodies for such definition are sport federations. The recently founded International Federation for Historical European Martial Arts (IFHEMA, <<http://www.ifhema.com/>> [accessed December 12, 2014]) argues towards a definition acknowledged by Sport Accord (<<http://www.sportaccord.com/en/members/definition-of-sport/>> [accessed December 12, 2014]), based on International Olympic Committee (IOC) definition.

<sup>60</sup> SportAccord definition of a sport (see previous note for references): “The sport should include an element of competition; not rely on any element of “luck” specifically integrated into the sport; not be judged to pose an undue risk to the health and safety of its athletes or participants; in no way be harmful to any living creature; not rely on equipment that is provided by a single supplier.”

<sup>61</sup> According to Sixt Wetzler, member of the German Association for Sport Sciences (DVS), commission for “Martial Art and Martial Sport”, a martial art should include these four dimensions regardless of geographical or historical boundaries: “Dimension of the exercise of violence; dimension of performance; dimension of philosophy and dimension of healthy body exercise”. See id., ‘Vergleichende Kampfkunstwissenschaft Als Historischkulturwissenschaftliche Disziplin – Mögliche Gegenstände, Nötige Quellen, Anzuwendende Methoden’, in *Menschen im Zweikampf – Kampfkunst und Kampfsport in Forschung und Lehre*, ed. by Sebastian Liebl and Peter

least from antiquity<sup>62</sup> – both are two faces of the same coin. If one regards the competitive aspects of HEMA: the will to test one’s abilities against others, and to have one’s skills acknowledged in a non-lethal environment, is not something new.

Nonetheless, in the 21st c., reviving or re-creating HEMA as a sporting activity is not without problems and it often leads to a variety of both conscious and unconscious choices that all have the potential to shift the focus away from the documented late medieval or renaissance martial praxis. At the centre of attention is usually competition. Both for martial artists and martial sportsmen and – women – regardless of geographical or historical boundaries, there is a need for testing skills, may it be in free-play situations (sparring) or in competitions.

Looking at how this was managed through historical times, one can only notice the similarities appearing between problematic situations of “the days of yore”, and the issues of nowadays: basically, it is often the very same things that surface. Among the top two topics that used to give, and still give, problems, are the safety of the practitioners and evaluation of the outcome of the fight. Restricting target areas (such as forbidding hits on the hands / arms) and using “safe” weapons (all things relative) are solutions that did come to the mind of our forefathers – and sometimes led to straying from the initial purpose. One can see for instance the various forms of tournaments that existed in Germany in the late 15<sup>th</sup>–early 16<sup>th</sup> c. (from *Scharfrennen* to *Kolbenturnier*<sup>63</sup>) which stemmed from martial games and became entities on their own. The latter were characterized by strict rules of behaviour, the use of specific gear and restrictions of techniques. The paired and opposed (anti-agonistic and agonistic) practice of martial activities is indeed documented from a very early time on.<sup>64</sup>

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Kuhn, DVS, 236, (Hamburg : Czwalina, 2014), pp. 57–66, quote pp. 58–59. English translation of the authors.

<sup>62</sup> For a discussion about terminology (*pankration* versus *pammachon* for Greek Antiquity), see the reference study of Michael B. Poliakoff, *Combat Sports in the Ancient World. Competition, Violence and Culture* (New Haven ; London: Yale University Press, 1987). However, it has been previously argued that the author lacked “hands-on” knowledge and did not include relevant archaeological findings in his research. For a discussion of these matters, see Alan Peatfield, ‘Reliving Greek Personal Combat – Boxing and Pancration’, in *The Cutting Edge: Studies in Ancient and Medieval Combat*, ed. by Barry Molloy (Stroud: Tempus, 2007), pp. 20–33.

<sup>63</sup> For the different forms of tournament in the 15<sup>th</sup> and 16<sup>th</sup> c., see the brief survey of Malcolm Barber and Juliet Barker, *Tournaments: jousts, chivalry and pageants in the Middle Ages* (Woodbridge: Boydell, 1989).

<sup>64</sup> See footnote 62 “antiquity”. For a period and area more close to the German Fight Books, see for example the challenge between Wate and King Hagen’s own fencing master in the German 13<sup>th</sup> c. epic *Gudrun*: Hage asked them to specifically test their skills against each other, as quoted in Rachel E. Kellett, *Single Combat and Warfare in German Literature of the High Middle Ages: Stricker’s ‘Karl Der Große’ and ‘Daniel von dem blühenden Tal’*, MHRA 72 (Leeds: Maney, 2008). For later examples, see Jaquet, ‘Fighting in Fightschools...?’.

There is literally no end in discussing competitive rulesets and their related pitfalls – again this paper is not about best practices – we would however like to outline one single fact: If HEMA practices in general are defined by the source material, so must their competitive practices be as well. This means that trying to write rulesets based on modern-day sporting requirements only (inspired by sport fencing for example) cannot be genuinely called “HEMA”.<sup>65</sup>

Some pitfalls that encourage the uncritical practitioner to move further and further away from the original artefact/historical context, with the sole aim of improving and promoting the performance and competitiveness of a modern sporting context, are listed below:

- a) “Lack of historical sources”: We have heard both practitioners and event organizers complaining about lack of sources concerning competitive practices. We would like to correct this statement by outlining that there is, in fact, a lack of academic research about such. Regional medieval or renaissance competitive practices have been researched already by individuals<sup>66</sup>, some of those published<sup>67</sup>, without mentioning that normative single combats (judicial duels, tournaments, duels of honour<sup>68</sup>) have been objects of intensive academic research for the past 100 years, at least.
- b) “Scoring as primary goal”: It is sadly frequent nowadays to see practitioners entering a competitive event with a number of tactical approaches and martial techniques not necessarily appropriate to the context of origin, and application, of a specific source. Practitioners even encourage behaviours that stray from several principles or core postulates of a source. Restricting the range of techniques so that the outcome is made clearer for fighters and/or onlookers is a

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<sup>65</sup> Neither can new tendencies seen in the North European Viking re-enactment scene, where people are starting to call HEMA their sportive and combative practices, because they wear modern equipment associated with HEMA e.g a modern fencing mask. However, examples of point-based rulesets can also be traced in the early Modern Period, see footnote 62.

<sup>66</sup> We can cite among others, Matthew S. Galas, who inquired about what he named “Franco-Belgian Longsword Rules”, based on guild documents (1540–1700). He self-published the results of his research on forums (SFI, etc.) and these are currently used (and misused) in various international and national competitions. Another example is Ilkka Hartikainen, who researched competitive practice about Bolognese swordmanship, mainly based on Fight Books. The results are self-published on his blog (<<http://marozzo.com>> [accessed January 10, 2015]).

<sup>67</sup> Olivier Dupuis, ‘A Fifteenth-Century Fencing Tournament in Strasbourg’, *Acta Periodica Duellatorum*, 1 (2013), 67–79. Some discussion and review of historiography in Jaquet, ‘Fighting in the Fightschools...?’.

<sup>68</sup> A good overview from multidisciplinary approach over an extended period of time is proposed on this collective volume about duelling: Ulrike Ludwig, Barbara Krug-Richter, and Gerd Schwerhoff, eds., *Das Duell – Ebrekämpfe vom Mittelalter bis zur Moderne* (Konstanz: UVK Verlagsgesellschaft, 2012).

solution that sprouted through the historical practice of martial arts in Europe. Counting successful blows or counting points, is another, the two being mutually non-exclusive. The main pitfall here would be the focus of one's practice toward the goal of scoring, while the context of the source, and the purpose of the technique, was significantly different. This tendency is furthermore enhanced by the induced impression of safety, leading to unsatisfactory outcomes (such as double hits), as mentioned before when discussing equipment. Limiting HEMA to a scoring-centric approach would be a significant stray from its origins.<sup>69</sup>

- c) “Useless techniques(?)”: The notion that some techniques contained in the source material should be disregarded because, as often heard, “they do not work in tournaments” – or in sparring, free-play “at real speed” – is induced by a combination of factors such as gear, approach, and sometimes all-too superficial knowledge of the source material. The technical information that is given in these sources all go through the filter of modern re-creation, i.e. are at best hypothetical constructions (hopefully based on thorough methodology and approach) that still must be seen as perfectible within their supposed original context. It is in such situations that a methodical basis is paramount. If a technique “does not work” (interpretation), then it should imply returning back to the workbench and working with new hypotheses. The following possibilities should at least be reviewed: the initial understanding of the technique is wrong (the overall context); the choices regarding equipment or fighting ground affects the outcome of the interpretation; or the fight interpreters lack the required sensorimotor skills.

### **III.4. Displaying martial skills – public demonstration and impact on the general audience**

The military aspects of history are among the most popular genres, generating a huge interest from the public. Re-enactment events, cultural mediation (demonstration in a museum or institution context) demonstrations, and even TV programs and series, draw more and more attention and have become common everywhere. This creates new, and partially untapped opportunities, for the diffusion of HEMA practitioner related activities. But with such attention also comes criticism and assessment of academic quality in the research for its “authenticity”. It is nowadays common for the critical curator or event organizer to ask questions concerning authenticity, performance and the HEMA researchers' communication qualities. It is precisely in such situations that the historically rooted HEMA researcher or skilled practitioner gets an opportunity to show his/her potential and worth – especially if the desire is to conquer other

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<sup>69</sup> There are things that you cannot do in a “safe” competitive environment. Deliberately injuring your opponent, even though the risk of physical damage can never be avoided, is righteously frowned upon. Using protective gear and restricting target areas are possible options. Forbidding certain techniques is another – all three being complementary.



“battlegrounds” than training halls in Europe and the U.S. If involved in such performances, one must inquire about the needs of the institution or event organizing staff, as well as care about the public reception of his/her performance. Re-enactment groups can usually display clothing, weaponry and furniture/accessories close to originals in their visual presentation. Theatrical fencing groups are usually competent in displaying quality and entertaining fighting skills. Historians and archaeologists are usually knowledgeable about history and material culture. Professional cultural mediators are usually skilled with interacting with a general audience (communication and pedagogical skills). The HEMA practitioner, usually able to display proper technical fighting skills, may however lack some of the previously mentioned skills and competences. In such context, all of these elements matter, and one must be humble enough to recognize their weaknesses and seek either cooperation from others or training to improve said skills.

If someone claims to demonstrate historical European martial arts, he/she must therefore at least be well prepared, knowledgeable about whys and wherefores of modern-day HEMA and be able to put in perspective the frame between restoring a martial heritage, conducting academic research and practicing a martial sport. They must also be honest and humble about their interpretations (being aware of their limits). For a HEMA researcher or instructor, failing in providing a quality workshop in a practitioner gathering has other types of consequences than in performing for a general audience under supervision from an institution... The greatest danger to the amateur HEMA researcher often proves to be the omnipresent danger of interpretation and argument from modern discourses and use of populist, erroneous, historical understandings.

#### **IV. CONCLUSION**

If this paper is intended for a broad audience unfamiliar with modern day HEMA related activities, the authors also hope it would be considered food for thought for the common practitioner. We argue that framing the activities in line with their original (or core) purposes and mandatory requirements is a necessity. A threefold categorisation was proposed, between practicing a martial sport, reviving or re-creating a martial heritage and conducting scientific research or experiments. It offered a brief review from the academic point of view of some of the issues related with the study of HEMA and proposed observation about identified pitfalls – according to the first part’s review – in broadly diffused modern-day practices.

HEMA is a complicated object of research, since it consists of a lost embodied knowledge that is hardly traceable in written or figured documents, nor directly found in the related material culture. The academic study of the main source, namely the Fight Books, is still in its infancy. More and more scholarship is dedicated to it and even the “hands-on” approach of the inscribed, described or codified bodily knowledge is slowly becoming acknowledged in some academic circles. Bridging the gap between common

practitioners, researchers and scholars, is in this sense, long overdue. However, both sides must understand each other's needs and best practices.

The last part of the paper discussed several issues, including, how modern discourses can affect research results and how modern equipment has the potential to distance the practitioner from his/her original goal: to re-create a lost historical European martial art. It was also discussed how, especially the sporting side of HEMA, paradoxically has the potential both to promote general research, but also to destroy the original goals and intentions.

With the late growth and development of HEMA related activities, seriousness and professionalism is becoming more and more necessary if the practitioner wishes to cooperate with universities and museums. It is mandatory for such institutions that a high level of authenticity is paramount and that the subject is treated seriously, in a dignified and professional way. In many cases for example, it will not have a positive effect to do a public presentation in painted fencing masks that resemble everything from clowns to superheroes.<sup>70</sup>

It is clear that all members in a HEMA club or study group cannot be defined as potential researchers. There is also nothing wrong with not wanting to be the next great HEMA researcher. There are of course different levels of experience and big differences within each group. Depending on the background and motivation for training in general, the practitioner's overall approach may include various forms of motivation such as: a romantic approach to historical arms and armour and their use, a form of extended role-playing, or as a sporting activity with its fitness, social or competitive dimension. It is thus natural to observe, at group level, a more sporting approach to HEMA, where authenticity and original context may be of less importance.

Such enthusiasts and their passion for martial arts, countless hours in training halls and the will to create a HEMA environment, should never be frowned upon. It should not be forgotten how their passionate, but also playful, competitive and enthusiastic approach creates new and exciting dimensions to HEMA. But it must also be stated that this is where the group leaders (and the instructors or researchers involved) bear the responsibility to define their approach and to care about the (mis)use of the terms related to the research aspects of HEMA, as outlined above.

Are all these analyses, methods, theories and critical questions, mentioned in this paper, really relevant for HEMA or WMA in general? Many practitioners would maybe disagree, especially if they primarily focus on the pragmatic/sporting aspects of HEMA and/or if they are unfamiliar or confused with academic research definition and related

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<sup>70</sup> Unless it is explained that the painted masks serve the purpose of identifying who's who for the audience (then with the reference indexes provided) – exactly as is known from historical sources. It should not be applied, just because it looks cool – and the historical reference should be explained to the organizers. It should also be considered paramount to use historical motifs (Heraldic motifs) instead of modern motifs, as the purpose still is to present historical material.

practices. When it is perfectly fine to do HEMA as a hobby or a sport, it becomes nonetheless a problem when “researchers” claim to restore an historical European martial art for “research purposes” or to display “arts” in connection with a “European cultural heritage”, but instead are following or creating practices within a new modern martial sport. The latter should then perhaps be labelled differently, if the “H” for “Historical” in the word HEMA is not counted as the most important letter. However, if the reader shares the authors’ inspiration to bring this kind of research to a “higher level” (up to academic standards or to serve as basis for evaluation of an intangible cultural heritage<sup>71</sup>), the answer to the question is a resounding yes!

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<sup>71</sup> Understood as the UNESCO 2003 convention « Safeguarding of the Intangible Cultural Heritage » states. See footnote 39.

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