1 Introduction

Violence permeates our everyday experience. The media reports more bad news stories than good ones; we are more likely to share bad news with friends or strangers; a previous violent incident will influence how we physically and psychologically experience the following one; and our outlook on life will colour the events that happen to us and our loved-ones, particularly if they concern our health and well-being (McCluskey et al., 2015, Peters et al., 2009, Price et al., 1999). Many of us have experienced violent events, and for those working in the social sciences, drawing on these memories and feelings allows us to believe that, somehow, we can gain a closer affinity to people from the past. Our personal histories can let us suppose that violence is cross-cultural and universal, when in fact the majority of the evidence is to the contrary – it is unique to the person, time and place in which it happened. This evidence is supported by the use of anthropologists by non-governmental organisations, whose work has highlighted and reinforced the importance of creating a community-driven response to trauma patterns in different groups rather than imposing a western psychosocial model which can be utterly inappropriate (Roddy et al., 2007, Watters, 2010).

We need to recognise the extent to which our own perceptions, through social conditioning shape our practice. The society and culture which shaped our upbringing and influence our present, condition us to recognise and interpret violent events and behaviours (Summerfield, 2004), leading us to believe that acts of violence can be legitimate, and that if people are a certain gender, age and of a particular social class, they are either more or less likely to be violent or experience trauma (Dixon and Linz, 2000). These stereotypes are so culturally ingrained that the choice of actor and model Jamie Dornan to play a serial killer a recent BBC drama gave rise to numerous articles in the British press focusing on the BBC’s choice of actor rather than addressing the drama’s exploration of violence against women in contemporary society (see Independent, n.d., Guardian, n.d.). These biases have (unconsciously) influenced the study of violence in palaeopathology and bioarchaeology, with the experiences of the marginalised, disenfranchised, children, women and the elderly only coming to the fore within the last decade (Martin and Harrod, 2014) – and only because we have re-examined the physical remains of these individuals, whose skeletons did not ‘forget’ these experiences. We had to improve our practice to ‘see’ them.
Introduction

It is only within the past few years that bioarchaeology has recognised the diversity of violence in the archaeological record and, striving to provide more culturally-sensitive and nuanced interpretations, it has opened our eyes to the possibility that horrific events happened in the past (Chacon and Mendoza, 2007, Knüsel and Smith, 2013, Martin et al., 2012, Schmidt and Lockhart Sharkey, 2012); as my colleague Jelena and I often remark to each other, not all of the 20,000 people we look after were nice people. Interestingly, within forensic anthropology literature, more and more people are writing about their responses to the human remains they encounter and how that affects them: the poignant chapter written by Galloway (2014) is one such moving example. Importantly, practitioners are also taking an ethical stand regarding the portrayal of our work in the media, such as the reporting bias of the British television series ‘Ancestors’ during a 2003 excavation of a First World War trench at Serre (France), whereby the unexpected finding of one British and two German soldiers, “was not welcomed by the BBC team, who expressed very little interest in the Germans and used the British casualty as an excuse to reiterate clichéd interpretations of the Great War” (Fraser and Brown, 2007, 168).

Over the many years that it has taken this book to reach completion, the study of past trauma trajectories, violence risk and patterning in life course perspective has experienced a sea-change, moving away from the case study and towards sensitive and culturally appropriate interpretations of the physical evidence for violence, and seen an increase in the number of journal and book publications concerning violence in the past; these advances have shaped the content of this book.

The purpose of this book is twofold: to review how injury, violence and trauma in past and contemporary communities is understood and interpreted, and second, to assess how this affects our interpretation of osteological data, through the use of case-studies to explore future research directions. The content draws on a diverse range of social and clinical science research to investigate violence and trauma in the archaeological record, focusing on human remains. It examines the biological, psychological and cultural factors that make us behave violently, how our living environment influences and causes injury and violence, the models used to identify and interpret violence in the past, and how violence is used as a social tool by different societies. Uniquely, it explores the consequences of violence in a bioarchaeological perspective and investigates patterns of injuries in impaired people. Despite the reviewed evidence being more European in origin, it is hoped that by drawing this evidence together, bioarchaeology can continue to work towards achieving culturally sensitive and nuanced interpretations of past lives.
2 Approaches to Understanding and Interpreting Violence in the Past

This chapter introduces the language and meanings of the words we use to describe violence in the archaeological record, emphasising the need to be both accurate and contextual. It provides an overview of the ‘Web of Violence’ model and ‘Ecological model of Violence’, two approaches which have come to the fore in the wider-literature and are proposed to be amongst the most relevant to bioarchaeology. It provides an overview of the ways in which the archaeological evidence (and absence) for violence in the past has been discussed in the social science literature.

2.1 Terms, Meanings and Models

The language we use to describe and categorise acts of violence directly influences how these are understood, discussed and shared between individuals and communities over time and space (Arendt, 2008, Betz, 1977, Denham, 2008, Rutherford et al., 2007). There are no universal meanings or definitions, and at the individual level, understandings can change across the life course in response to the events and circumstances we encounter; additionally, its meaning varies considerably between languages, emphasising its relationship with the cultural context (Bäck, 2004, Bowman, 2001, 42). The close association between the meaning of violence and culture has been explored by Blok (2000, 24, 33) who notes that it is not a ‘natural’ or unchanging fact, but is a shifting form of interaction and communication. This is most evident in the classification and punishment of crimes (Blok, 2000, 27) and in recent times, the establishment of ‘Trauma site’ museums (Bastarrachea, 2008, Violi, 2012) and cemeteries after the two World Wars (Mant and Lovell, 2012). However, Coady (1986) reminds us that there is often a large disparity between normal and everyday understandings of violence and those used and discussed by academics in the social and clinical sciences, with everyday understanding of violence being synonymous with inter-personal violence. Violence has been described by Engle Merry (2009, 4) as a ‘deceivingly simple concept’, because it depends on the social position of the observer and context of the event. Since the 1970s, meanings have changed from, blows and physical injury, to a wide variety of concepts such as: assaults on self-esteem, personal possessions, and emotional and financial well-being (Engle Merry, 2009, 5, 181). Riches (1991, 286) has discussed this
highly complex problem and proposes that violence should only refer to matters of ‘contested physical hurt’ but as discussed by Engle Merry (2009), this is not a binding or universally accepted definition (Strathern and Stewart, 1999, 89–90). Numerous theoretical models exist to explain and understand violence, these have been reviewed by Turpin and Kurtz (1997a) who raise a number of problems: disciplines have compartmentalised meanings, an approach which limits creativity and more nuanced understandings (see Reiss and Roth, 1993); the majority of scholars focus on one level of violence – psychologists and biologists look at the individual, while sociologists, anthropologists and political scientists examine collective and interstate violence; social science methodologies focus on a specific form of violence that is limited in spatial/temporal terms; and there is a lack of diversity, with research by women, non-westerners and people of colour marginalised. Beginning with violence, the term comes from the Latin ‘violentus’ and is defined as: ‘exertion of physical force so as to injure or abuse in … an instance of violent treatment … intense or turbulent action or force’ (The Penguin Dictionary, 2004, 1573), the term also means to violate, but the relationship between these two terms is not simple, because it is not clear what is being violated when an act of violence takes place – additionally, violation can occur without violence and vice versa (Bufacchi, 2004, 2005). The World Health Organization definition may be the most useful for bioarchaeological research, ‘the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation’ (World Health Organization, 2002a, 5). This definition excludes unintentional accidents and their subsequent injuries, and instead focuses on intention – intent to use force or an intention to commit an act that may cause injury or disability. Importantly, although the World Health Organization recognises the relationship between culture and violence, it observes that violent acts may not be universally recognised or defined as such by different communities; consequently, they concentrate on acts of violence (public or private) that result in health implications (World Health Organization, 2002a, 5).

Within the social sciences, violence is regarded as having ‘several natures’ and is an important ‘ingredient’ in reality (Aijmer, 2000, 1). For the most part, violence can be understood as either creating or destroying order, and establishing legitimacy for successful individuals (Bowman, 2001, Stewart and Strathern, 2002, 2, Strathern and Stewart, 1999, van der Dennen, 1980). Other terms frequently employed in the bioarchaeological literature include, trauma and injury. Like violence, how these terms are defined and understood is dependent on the field of study – medicine, psychology and the social sciences. Trauma injuries from the United Kingdom have been described as a ‘matter of changing social constructions of experience, in the context of particular clinical, cultural, and political ideologies’ (Kirmayer et al., 2008, 4). The word trauma has its origins in the Greek word for wound (tpàμa), and in the medical literature it became associated with physical wounds from the mid-1600s and by the 1800s it was employed to describe the psychological consequences of living in an industrialised environment and from
that time on, developed its own meanings in the psychological literature (Kirmayer *et al.*, 2008, 5). In contemporary clinical literature it is defined as: ‘a physical wound or injury, such as a fracture or blow’ (Oxford Concise Medical Dictionary, 2000, 670). This definition includes the term injury. Observations about physical injury, and their associated sources of data, taken from Johnson (2006, 2008) and Johnson and Leone (2005), show that it has a Latin origin – *injuria* – a word which can be used to describe damage, hurt or an injustice, or a wrong (The Penguin Dictionary, 2004, 722). The International Classification of Disease published by the World Health Organization classifies injuries as intentional and unintentional and defines injury as being ‘caused by acute exposure to physical agents such as mechanical energy, heat, electricity, chemicals, and ionizing radiation in amounts that exceed the threshold of physiological tolerance. In some cases (for example, drowning and frostbite), injuries result from the sudden lack of essential agents such as oxygen or heat’ (Peden *et al.*, 2002).

In bioarchaeology, the majority of human remains curated for study lack soft tissue and this fact has shaped our conception of trauma and injury, although there is little consistency between scholars in the range and variety of lesions that are considered to have a traumatic or violent origin. Ortner (2003, 120) stated four ways in which trauma could affect the skeleton: a partial or incomplete break in a bone; abnormal displacement or dislocation; disruption in nerve and/or blood supply, and artificially induced abnormal shape or contour of bone. Ortner (2003, 177) also observed that, ‘the variants of trauma … affect the skeleton in so many ways that a comprehensive review would fill the pages of a substantial book’. In contrast, and fulfilling the purpose of their encyclopaedia, Aufderheide and Rodríguez-Martín (1998, 19–50) provide a definition of each type of trauma. Lovell’s (1997, 139) review provides an un-referenced definition: ‘trauma may be defined many ways but conventionally is understood to refer to an injury to living tissue that is caused by a force or mechanism extrinsic to the body’. Roberts (1991, 2006) has consistently provided a definition which reflects her clinical training, ‘trauma can be defined as any bodily injury or wound’ (Roberts and Manchester, 2005, 84), and follows the four subdivisions published by Ortner and Putschar (2002a, 12) recognises that ‘violence is the result of the complex interplay of individual, relationship, social, cultural and environmental factors’. The first stage, individual, examines the biological and personal history reasons that affect a person’s behaviour; the relationship stage looks at close personal relationships – those between peers, partners and family; the community
stage identifies the social environment in which the relationship stage exists, such as schools, population density and levels of crime or unemployment in a person’s community; finally, the societal stage studies the factors which determine rates of violence such as: cultural norms which allow violence to be the ‘right’ way of solving conflicts, norms that support male dominance over women and children, and those which support political conflict and the use of excessive force by the police against citizens (World Health Organization, 2002a, 13). It is evident that this model recognises the powerful role of structural violence at all levels of the model.

In the social sciences, a concept of understanding violence that has gained in popularity is ‘the web of violence’ framework (Turpin and Kurtz, 1997b). By conceptualising violence as a web, the inter-connectivity of violence between individuals, groups, communities and nations is made clear (Turpin and Kurtz, 1997b); ‘the causes of violence, from inter-personal to global, are connected, as are the consequences’ (Turpin and Kurtz, 1997a, 12). Being mindful that violence does not occur in isolation, allows the researcher to see how violence sustained during childhood may lead that person to be both a victim and/or a perpetrator of inter-personal violence in adulthood (Hamby and Grych, 2013), a pattern often observed in studies of child abuse (Herrenkohl et al., 2003). The proponents of the model, Turpin and Kurtz (1997b) and Hamby and Grych (2013), emphasise the relationship between the micro and macro scales of violence (i.e. domestic violence and warfare) and believe that conflict is endemic to social life – they also recognise the part structural violence plays in violence. The links between micro and macro levels of violence were first identified by gender scholars, because they were able to show that patriarchal cultures and sexist ideologies create micro-level violence against women and children and also propagate macro-level violence, such as warfare (Turpin and Kurtz, 1997a, 9–10). The web of violence and ecological model of violence are useful approaches to understanding archaeological evidence because they emphasise the connections between age, gender, environment, social and economic statuses and health, relationships inherent within a bioarchaeological approach (Buikstra and Beck, 2006, Buzon et al., 2005).

Using the World Health Organization (2002a) ecological model of violence, the societal scale includes warfare, a form of collective violence (de la Roche, 2001). This scale of violence takes place between groups and nations and appears to be caused by: unequal access to power, social inequalities, control of resources by a single powerful group and rapid demographic changes that cannot be coped with by government (Carnegie Commission on Preventing Deadly Conflict, 1998, World Health Organization, 2002a). As with the term violence, defining the term war is very difficult, as it depends on the context and the background of the organisation or person creating the definition. One dictionary definition is: ‘a state or period of open and declared armed hostile conflict between states or nations ... a struggle between opposing forces or for a particular end’ (The Penguin Dictionary, 2004, 1588) and differs from conflict, which ‘involves disputing over issues and interests that may lead to violence or the use of force whose legitimacy may be contested’ (Strathern and Stewart, 1999, 89). People's perception of what war and warfare is
has changed over time, in tune with changes in prevailing philosophical traditions, to the extent that today in the western world, it is understood as a ‘moral’ activity and should not be mistaken for evidence of violence (Warburton, 2006, 38, 52). The majority of literature agrees that it is a state activity rather than conflict between tribes or small groups (amongst others, Ember and Ember, 1994, Thorpe, 2005, Thrane, 2006, Otterbein, 2004). Early states are considered to have been created when there was population growth, an ideology that legitimises leadership, domination of the economy, increasingly complex socio-political organisation, and limited military apparatus (Claessen, 2006, 224–5). Many of these ideas originate from Carneiro’s (1970) ‘Circumspection theory’ which Claessen’s (2010) work has heavily criticised. He has been able to show that contemporary examples and anthropological research demonstrate that population pressure and violence do not necessarily create a state, instead he suggests that the origins of a state are encouraged by war but they usually arise from multiple factors, such as demographic, economic, ideological causes and politico-strategic causes (Claessen, 2006). Additionally, Warburton (2006) has noted a trend in the warfare literature that affects interpretation, whereby prehistoric warfare is considered quite differently and emphasises victims and victors, weapons, battles and fortifications; whereas, historic warfare focuses on trade, politics and diplomacy.

The application of the term warfare to organised tribal violence is dependent on the definition employed, although many anthropologists and archaeologists believe that warfare only applies to conflicts between states (e.g. Otterbein, 2004, 1997, Thorpe, 2005). Ferguson (1990, 1984) describes war as ‘organized purposeful group action, directed against another group … involving the actual or potential application of lethal force’, though the use of the word ‘group’ means that it can rightly be applied to conflicts between tribal and other pre-state communities. Guilaine and Zammit’s (2005, 24) definition also extends to individual action, ‘bloody clashes between small groups, raids carried out on neighbouring parties, ambush attacks, and even individual murders’. Tribal warfare is proposed to consist of ambushes, surprise attacks and open armed clashes that may escalate to battles, and is predominantly studied by five theoretical models: biological, cultural, ecological and economic, historical and political (Helbing, 2006). Why tribal societies engage in conflict/war is influenced by myriad factors, which include: fighting to maintain their liberty and individualism, to obtain resources, the development of sedentism, and the impact of environmental change on resource availability (Ferguson, 2006, 2000, 1990, Guilaine and Zammit, 2005, Haas, 2004, Kelly, 2007, van der Dennen, 1995).

The final term to be outlined is inter-personal violence, a relationship scale of violence that includes murder, fighting, and violence against intimate partners, children and the elderly (Almgren, 2005, World Health Organization, 2002a). This type of violence is usually inflicted without the use of weapons (slaps, hits, kicks and beatings) and includes, psychological abuse, forced sexual intercourse and controlled behaviours (World Health Organization, 2002a, 89). The possible reasons for this type of behaviour are discussed in Chapter 3 in considering the ‘human
nature or nurture’ question and include early exposure to violence and poverty. A cross-cultural review by Ember and Ember (1993) and work by Herrenkohl et al. (2010) highlight the problem of defining this type of violence, because of the vast cultural variation, as shown by the ever increasing body of psychological and clinical data, as well as the focus of many journals (e.g. James et al., 2003, Le Franc et al., 2008, Lown et al., 2006, Rosenberg et al., 2006a). Similarly to societal scales of violence, inter-personal violence has been shown to have enormous economic costs. For example, the annual cost of domestic violence to the economy of the United States of America (USA) is greater than $5.8 billion per annum. The costs of this type of violence are considered to be higher in developing countries but difficult to estimate – based on lost productive capacity, it is proposed to cost Nicaragua US$32.7 billion per year (Rosenberg et al., 2006b).

2.2 Violence and Conflict in the Past

Conflict is a social phenomenon and should be understood in its social, economic, political and environmental context (Armit et al., 2007, Armit, 2010, Brothwell, 2004, Carman and Harding, 2004a, Vandkilde, 2006). As with the definition of different types of violence, approaches to its identification vary considerably (i.e. Ferguson, 1997, Thorpe, 2005, Vencl, 1984). In part, this reflects the nature of the archaeological record, because military activities and warfare may not actually create a physical object that could eventually become an artefact (Carman and Harding, 2004a, Jones, 2010, Redmond, 1994, Vencl, 1984). Nevertheless, the growing research area of battlefield archaeology has demonstrated that although prehistoric episodes of warfare may be identified, it is far more likely that historical ones will produce evidence for conflict (Carman and Carman, 2006, Sutherland, 2005 amongst others, Scott et al., 2000, Scott and McFeters, 2011).

The close ties between culture and conflict can generate items that are associated with the undertaking of physical violence such as amulets, to provide protection, luck and motivation (Helbing, 2006, 122, Redmond, 1994). However, making the connection between the artefact and a past action is contentious, because of the multiplicity of meanings that an object may have had over its use (Gosden and Marshall, 1999, White and Beaudry, 2009). One of the most widely applied approaches is that advocated by Vencl (1984, 125–7), who identifies the following archaeological sources: weapons, iconography, warrior graves, physical evidence for injuries and fortifications. He also recommends that evidence for cultural changes should be investigated for potential links to warfare (Vencl, 1984, 124), this is taken up by Ferguson (1997, 344) who emphasises the need to undertake regional scales of analyses to better understand the available data. The application of the type of data identified by Vencl (1984) have recently been discussed by Armit et al., (2007) who, like other authors, acknowledge the problems associated with each data type (e.g. Arkush and Allen, 2008, Chacon and Mendoza, 2007a, 2007b, Chapman, 1999, Ferguson, 2008, Lambert, 2002, Stanton and Brown, 2003).
Redmond’s (1994) work on warfare in South America also discusses the attempts of scholars to identify the incidence of warfare by the presence of certain material artefacts, for example weapons. Instead, Redmond (1994) suggests that research should extend to examining a wider range of social activities such as pre-war rituals, and offensive and defensive strategies. Such an approach has been explored by Arkush and Tung (2013), who united bioarchaeological data and archaeological evidence for settlement patterns to assess the extent to which Andean populations in pre-Columbian Peru were affected by warfare between 400 BC and AD 1400. Their analysis identified regional variation, periods of conflict interspersed with episodes of peace, and warfare could be linked to periods of climate shock, and breakdowns in socio-political structures (Arkush and Tung, 2013). Interestingly, warfare was not linked to large-scale highly impactful transitions, such as the adoption of domesticates, or the use of warfare imagery in material culture and violent performance, such as the taking of trophy heads and public human sacrifices (Arkush and Tung, 2013). Overall, they concluded that the most reliable datasets for examining the scale and brutality of warfare between non-state polities were settlement patterns and bioarchaeological evidence for trauma; they also noted the need to re-examine human remains in old collections in order to ensure that evidence is not being missed (Arkush and Tung, 2013).

The greater involvement of bioarchaeology and funerary studies in social archaeology has allowed their data to be recognised as an important source of independent information about violence in the past (Armit, 2010, Crist, 2006, Lowell, 2007, Milner, 1995). However, it should be noted that many archaeological publications that use bioarchaeological data often cite a lack of skeletal evidence for violence in prehistoric populations as evidence for the absence or low incidence of warfare or conflict, but do not appreciate the role of burial practice and taphonomy (Bello and Andrews, 2006, Dudy, 2009); in addition to the clinically established fact that over an individual’s lifetime, a person will experience more injuries to the soft tissue compared to the skeleton (e.g. Johansen et al., 2008). Many of the publications examining the relationship between conflict and skeletal evidence derive from studies which are supported by primary evidence for conflict, such as battles or conquests recorded in primary records (e.g. Brodholt and Holck, 2012, During, 1997, Ingelmark, 1939, Kępa et al., 2013, Liston and Baker, 1996, Roksandic et al., 2006, Verano, 2007). However, in recent years, with the growth of forensic anthropology and its greater integration into bioarchaeological data collection and methodologies, research has concentrated on how to identify conflict in the absence of primary sources or other evidence, such as embedded weapons or written sources (e.g. Holst, 2005, Ostendorf Smith, 1997, Smith et al., 2007). Such publications have focused on the skeletal evidence for trauma – weapon injuries, fractures and post-mortem modification (Erdal, 2012, Knüsel, 2005, Martin et al., 2001, Murphy et al., 2010, Verano, 2005), which many consider to reflect only a part of the reality of violence. As with the growth of the study of structural violence in anthropology (Farmer, 2004), others also propose that additional sources of skeletal information such as, growth, indicators of stress and general health patterns should also be employed to

2.3 Social Science Approaches to the Understanding of Violence in Human Societies: An Overview

In all human societies, violence has not simply been a matter of fights or warfare, it is a far more complex and nuanced phenomenon, embedded in social and cultural frameworks (Abbink, 2000, Aijmer, 2000, Aijmer and Abbink, 2000, De Vries, 1997, van der Dennen, 1995). The work of Anton Blok (2000) has shown that within contemporary western, pacified societies, violence is regarded as ‘senseless’ and ‘irrational’, a view which has permeated social science research that sees peace as ‘natural’ and violence its polar-opposite (see James, 2007, Otterbein, 2012). Increasingly, this mind-set is being critiqued and shown to be biased, a view encapsulated in a statement by Schepers-Hughes and Bourgois (2004a, 2–3), ‘we have rejected the commonsense view of violence as essential, universal, sociobiological or psychobiological entity, a residue of our primate and prehistoric evolutionary origins as a species of hunter-killers’. As these authors adeptly show, we should move away from a starting-point which rejects violence as part of human nature, particularly in the light of the considerable amount of clinical, anthropological and social science research which shows that violence is a common feature of individual personality traits, and a frequent occurrence in human societies.

Schröder and Schmidt (2001, 1) have examined different approaches to understanding violence and describe the three main approaches in the social sciences: the operational approach that focuses on measurable material and the political causes of conflict, the cognitive approach which examines the specific cultural construction of war in a particular society, and the experiential approach that recognises that violence structures everyday lives and is not restricted to inter-group conflict. They observe that the majority of studies contain aspects of all three approaches and note that within anthropology, they ‘make up the whole spectrum of violence’ (Schröder and Schmidt, 2001, 2). These authors recognise that for the successful party, violence has benefits over the short or long term as it is never a totally isolated act that lacks sense or meaning, because the highly visible nature of violence enables it to have a strong performance aspect (see also, Blok, 2000). The results of violent events are unique, because they take place at particular times in certain locales. These events are frequently incorporated into society’s collective memory and therefore, can be recreated and enacted to allow the group to continue to remember actions, promote ideologies, or used to control individuals or groups by reinforcing the outcome of past events (Schröder and Schmidt, 2001, 6–14). Violence is considered by many to involve at least three people or groups – the performer, victim and witness, who will have their own interpretation and understanding of the event (Stewart and Strathern, 2002, 35, Whitehead, 2004).