Abhandlung

Tobias Hofstetter*, Jocelyne Desideri, François Mariéthoz, Marie Besse

Human Skeletons, Grave Goods and Textual Sources: A Multidisciplinary Approach to South-western Switzerland's Late Iron Age Communities through the Study of their Funerary Rites

In memoriam Gilbert Kaenel (1949–2020)

<https://doi.org/10.1515/pz-2021-2021>

Zusammenfassung: Das Hauptziel der vorliegenden Studie liegt in der Untersuchung von späteisenzeitlichen Bestattungssitten. Dies erfolgt anhand einer multidisziplinären Untersuchung zweier Nekropolen (Randogne – Bluche und Sion – Parking des Remparts) in der Südwestschweiz, in der Wallis Region. Das übergeordnete Ziel war die Verbesserung unseres Verständnisses der soziokulturellen Dynamiken dieser Periode in einem integrierten Ansatz, der die Bereiche biologische Anthropologie, Archäologie und alte Kulturgeschichte verbindet. Daher wurden zunächst Geschlecht, Alter, Pathologien und biologische Nähe für die Individuen aus den beiden in Frage kommenden Nekropolen bestimmt. Anschließend wurden diese Nekropolen in ihr regionales archäologisches und kulturelles Umfeld eingefügt. Schließlich wurden die durch diese verschiedenen Ansätze gesammelten Daten in einer kombinierten Perspektive betrachtet. Die so gewonnenen

Ergebnisse scheinen auf einen regionalen Partikularismus der südwestschweizerischen Bestattungsriten in der späten Eisenzeit hinzuweisen. Dennoch lassen sich in den Bestattungsriten und materiellen Produktionen der Südwestschweiz kulturelle Einflüsse sowohl aus den nördlichen als auch aus den südlichen Nachbarregionen nachweisen, was Aufschluss über die Funktionsweise der keltischen Gemeinschaften in dieser Region gibt.

Schlüsselworte: Gesellschaftsforschung, Archäologie, La Tène-Zeit, Zweite Eisenzeit, Wallis, Schweiz, Biologische Anthropologie, Altertumsgeschichte

Résumé: Cette étude traite des pratiques funéraires de la fin de l'âge du Fer. Elle se base sur une analyse multidisciplinaire de deux nécropoles (Randogne – Bluche et Sion – Parking des Remparts) situées dans le sud-ouest de la Suisse, dans la région alpine du Valais. L'objectif premier était d'améliorer notre compréhension socioculturelle de cette période dans le cadre d'une approche intégrée, combinant les domaines de l'anthropologie biologique, de l'archéologie et de l'histoire culturelle ancienne. Par conséquent, le sexe, l'âge, les pathologies et la proximité biologique ont d'abord été évalués pour les individus des deux nécropoles en question. Par la suite, ces nécropoles ont été insérées dans leur environnement archéologique et culturel régional. Enfin, les données collectées par ces différentes approches ont été considérées dans une perspective combinée. Ainsi, les résultats obtenus semblent mettre en évidence un particularisme régional tangible dans les pratiques funéraires du sud-ouest de la Suisse à la fin de l'âge du Fer. Néanmoins, les influences culturelles des régions voisines du nord et du sud peuvent également être identifiées dans les rites funéraires et les productions matérielles du sud-ouest de la Suisse. En fin de compte,

*Corresponding author: Tobias Hofstetter, Faculté des lettres et sciences humaines, Institut d'Histoire, Université de Neuchâtel, Neuchâtel, Suisse. E-Mail: tobias-hofstetter@hotmail.com; ORCID: <https://orcid.org/0000-0002-7854-8848>

Jocelyne Desideri, Laboratoire d'archéologie préhistorique et anthropologie, Département F.-A. Forel des sciences de l'environnement et de l'eau, Section des sciences de la Terre et de l'environnement, Université de Genève, Genève, Suisse. E-Mail: jocelyne.desideri@unige.ch; ORCID: 0000-0003-1372-7420

François Mariéthoz, Département de la santé, des affaires sociales et de la culture, Service de la culture, Office Cantonal d'Archéologie, Sion, Suisse. E-Mail: francois.mariethoz@admin.vs.ch

Marie Besse, Laboratoire d'archéologie préhistorique et anthropologie, Département F.-A. Forel des sciences de l'environnement et de l'eau, Section des sciences de la Terre et de l'environnement, Université de Genève, Genève, Suisse. E-Mail: marie.besse@unige.ch; ORCID: 0000-0002-4752-9070

ces divers éléments permettent d'affiner notre compréhension du fonctionnement des communautés celtiques qui peuplèrent cette région durant l'époque La Tène.

Mots-Clés: Société, Archéologie, La Tène, Second âge du Fer, Valais, Suisse, Anthropologie biologique, Histoire ancienne

Abstract: This paper's primary focus is the investigation of Late Iron Age funeral practices. This is carried out by means of a multidisciplinary study of two necropolises, Randogne – Bluche and Sion – Parking des Remparts, which are located in southwestern Switzerland. The overall purpose of this paper is to enhance the socio-cultural understanding of this period through an integrated approach that combines the fields of bioanthropology, archaeology and ancient cultural history. Consequently, sex, age, pathologies and biological proximity first were assessed for the individuals found in the two studied necropolises. Next, data from these necropolises was contrasted with the archaeological and cultural environment from the surrounding regions. Finally, a combined perspective was developed in order to consider and combine the data collected through these different approaches. The obtained results appear to point to a regional particularism present in southwestern Switzerland's funerary practices during the Late Iron Age. However, cultural influences from both northern and southern neighbouring regions can be identified in southwestern Switzerland's funerary rites and material productions, which sheds light on the innerworkings of the Celtic communities populating this region.

Keywords: Society, Archaeology, La Tène, Late Iron Age, Valais, Switzerland, La Tène, Biological Anthropology, Ancient History

Introduction and Aims: The study of two recently discovered necropolises as a pretext for a multidisciplinary reassessment of southwestern Switzerland's Late Iron Age communities through the study of their funerary rites

The following paper presents the results of a bioanthropological study and an analysis of funerary rites observed

within two Late Iron Age¹ necropolises in the mountainous Valais region, situated in southwestern Switzerland. It also compares the archaeological insight acquired with written accounts produced during Antiquity, in order to deepen our understanding of the functioning and organisation of Late Iron Age communities living in Valais.

More precisely, the two necropolises studied are located in Randogne, on a plot known as “Bluche 2000” (hereafter: “**Randogne – Bluche**”) and in the medieval old town of Sion, at the “Espace des Remparts” (hereafter: “**Sion – Parking des Remparts**”). These two necropolises are situated on the territory recognised by several Antic authors, including Caesar, Pliny the Elder, Strabo and Livy (cf. below: section “Antique textual sources”), as well as by modern historians and scholars specialising in the study of Antiquity, as belonging to the Celtic community of the Seduni².

This article demonstrates the significance and importance of these two cemeteries within the regional funerary landscape of the Valais region through the use of newly gathered and/or previously available bioanthropological, archaeological and historical data pertaining to these two necropolises and the funerary rites of the people buried there³. By doing so, this paper ultimately aims to deepen current knowledge of Late Iron Age communities with a regional focus on southwestern Switzerland. In this sense, the Bronze and both Iron Ages represent complex periods in European and Swiss archaeology, spanning over two millennia⁴; they were punctuated by technological innovations that led to significant changes in the social and economic fabric of this era. The dawn of metallurgy and the control of its production and diffusion resulted in the emergence of new social and economic elites and induced a strong segmentation of society⁵. At the same time, the production of metal and its trade led to continental mobility and dynamism previously unrivalled in the history of humankind⁶. Although this period is well understood on a global level, there are still many points that need to be examined more closely, in particular, at a regional level and considering smaller chronological intervals. This ap-

¹ Also known as the Second Iron Age or “La Tène” period in Continental Europe.

² According to Caesar (Duval, transl.) 1981; Curdy *et al.* 1997, 2009; Curdy 2000; Curdy/Pacolat 2002; Kaenel 2009; Livy (Flobert, transl.) 1999; Strabo (Forbiger, transl.) 2005; Pliny the Elder (Schmitt, transl., 2013).

³ Curdy *et al.* 2009; Hofstetter 2018.

⁴ Otte 2002; Jud/Kaenel 2005.

⁵ Birkhan 1997; Buchsenschutz 2015.

⁶ Briard 1997; Milisauskas 2002; Otte 2002; Jud/Kaenel 2005; Perrin 2006.

proach draws its methodological legitimacy from the observation that to ensure the accuracy of the interpretation of a given period as a whole, it is essential to have a solid understanding of the local and short/mid-term dynamics leading to large-scale transformations⁷.

General Context and Problematic: The evolution of funerary rites in Valais during the Iron Ages and understanding the implications that stem from it

On the basis of the previously exposed methodological considerations, we will present the current state of knowledge regarding Iron Age funerary rites in Valais. Incidentally, this region provides an exceptional continuity of funeral structures extending without almost any interruption from the middle of the Neolithic to the Early Middle Ages (especially the Sion necropolis – Sous-le-Scex)⁸. More specifically, for the protohistoric period and the Early Iron Age (or “Hallstatt” period), the numerous necropolises found within this region constitute a privileged source of information on funeral rites⁹. These practices can be summarised as follows: the deceased are usually buried in tombs situated under mounds (known as “*tumuli*”). Today, the latter are almost entirely eroded, and it is also worth mentioning that the large majority of them present a built peripheral stone rim, which usually allows for their identification in excavations. In general, there is a so-called “main” tomb, which roughly occupies the centre of the burial mound, while a series of “secondary” tombs can be found in its immediate vicinity. The overall architecture of these different kinds of tombs is relatively homogeneous. They are generally pit tombs and do not display any preferential orientation. These pits are stabilised laterally by slate slabs, while a cover slab, also made of slate, closes the tomb. In terms of funerary rituals, the burials are almost exclusively individual, and the bodies are deposited either directly in the earth or in a coffin, believed to be monoxyl, as suggested by some traces of preserved wood. The deceased almost exclusively lay flat on their back, with minor variations observable in the position of the upper or lower limbs. Additionally, a

non-negligible number of Early Iron Age burials stand out due to the richness of the grave goods they contain. In addition to objects made of iron, such as knives, razors or swords, and ceramics (bowls and other containers), some tombs contain precious gold artifacts, such as necklaces and other pendants, rings, bracelets and clothing accessories (pins or fibulae) made of bronze, or ornaments made of lignite. The exceptional richness of these burials crystallises the social importance of the deceased contained within¹⁰.

As far as Late Iron Age funerary practices are concerned, the different currently known necropolises in Valais provide us with information on the treatment of the deceased during this period. Thus, we know that these funerary practices mainly are characterised by visually less ostentatious individual burials¹¹. The bodies almost exclusively are placed in a wooden container (board assembly or monoxyl coffin). Moreover, the burials display a relatively constant orientation to the northeast/southwest, while the bodies strictly are deposited lying flat on their backs (with the notable exception of a select few graves, *cf.* below), while minor variations are observable in the position of the upper and lower limbs. Grave goods mainly take the form of clothing accessories made of iron or bronze (mainly fibulae) and, more rarely, the deceased wear ankle rings or bronze bracelets. The dead usually are also offered a piece of pottery located at the back of their heads¹².

In short, one observes a shift from visually ostentatious graves during the Early Iron Age to more sober tombs during the Late Iron Age. However, this visually more egalitarian treatment of the dead during the Second Iron Age should not obscure the fact that a hierarchy amongst the dead, and by extension amongst the living, also existed during the Second Iron Age¹³. This observation constitutes the central problematic of this article, along with the fact that these funerary rites tend to evidence a certain cultural exceptionality. As explored below, Late Iron Age burials in Valais tend to distinguish themselves by the richness of their grave goods (even if they appear to be less richly endowed than their counterparts from the Early Iron Age). In parallel, these graves also display specific funerary rites, which reflect an archaeologically perceptible regionalism¹⁴. At the same time, they also show strong links with neighbouring regions, particularly those located to the

7 Testart 1991, 2007, 2013; Thurston 2009; Gallay 2011.

8 Curdy *et al.* 2009.

9 Curdy *et al.* 2009; Mariéthoz 2011; Piguet 2011.

10 Curdy *et al.* 2009; Kaenel 2009; Mariéthoz 2011.

11 Birkhan 1997; Buchsensschutz 2015.

12 Curdy *et al.* 2009; Mariéthoz 2011.

13 Birkhan 1997; Curdy *et al.* 2009; Buchsensschutz 2015.

14 Curdy/Paccolat 2002; Curdy *et al.* 2009; Curdy *et al.* 2010; Curdy *et al.* 2012.

north and south of the Alps¹⁵. Hence, studying funerary rites in combination with historical sources appears to be a legitimate and interesting way to develop a better understanding of the behaviour and lifestyles of Valais' Late Iron Age populations. This applies all the more in the specific case of Alpine and perialpine Celtic communities, as the latter are known essentially thanks to the archaeological investigations of their burials and funerary rites¹⁶.

Methodology

Bioanthropologically speaking, our first aim was the elaboration of a biological identity for each individual unearthed in both necropolises under investigation. This was done in terms of sex¹⁷ and age at death for both adults¹⁸ and immature subjects¹⁹. Furthermore, every individual was analysed for pathologies and non-metric dental and skeletal variations, according to observation standards developed respectively by Crubézy and Sellier²⁰, Crubézy *et al.*²¹, Barnes²² and Verna²³ for cranial and post-cranial non-metric variation recording, Turner *et al.*²⁴, Scott and Turner²⁵, Alt²⁶, Alt and Türp²⁷ and Hillson²⁸ for dental non-metric variation, as well as Aufderheide and Rodriguez-Martin²⁹, Beauthier³⁰ and Quatrehomme³¹ for pathological description and recording.

Once all these bioanthropological parameters were recorded, they were compared with archaeological parameters, such as the chronological and spatial development of the necropolises, the orientation of the graves and their architecture, as well as the presence or absence of grave

goods and the observed inhumation positions of the individuals.

Afterwards, this elaborated dataset was compared to written accounts from Antique textual sources in order to draw inferences from the socio-cultural dimension of the analysed funerary practices.

Archaeological data

The first scientific investigations of Late Iron Age archaeological sites in Valais date back to the 19th century. Currently, a total of 11 necropolises, comprising a total of 85 individuals and spanning from 470 BC to 25 BC, are known to exist in Valais (Figure 1)³².

The present article focuses on the latest two discovered³³: the necropolis of Randogne – Bluche (Figure 2), comprising 21 graves (13 inhumation and 8 cremation graves), which were unearthed between 2001 and 2005, on a rocky outcrop above the Rhône river valley (referred to as the “Montana Plateau”), at an altitude of over 1200 metres above sea level; and Sion – Parking des Remparts (Figure 3), comprising 12 inhumation graves, which were discovered near the Rhône river, in the modern town of Sion, at an altitude of 500 metres above sea level. The two necropolises are located 15 kilometres apart and have been thoroughly archaeologically investigated³⁴.

Our primary focus was the study of the inhumation graves, as the cremations yielded only small amounts of extremely fragmented and strongly calcinated human remains. Nevertheless, the discovery of a few pottery shards and caligulae nails, enabled us to date them to the Augustan (27 BC to 14 AD) or the Tiberian period (14 AD to 37 AD); a fact that suggests the possibility of continued use or re-use of this Second Iron Age necropolis during early Antiquity³⁵.

Taking into account only the inhumation graves, one observes that they share similarities in terms of architecture and funerary treatment; all the graves are set in oblong

15 Curdy/Paccolat 2002; Curdy *et al.* 2009; Curdy *et al.* 2010; Curdy *et al.* 2012.

16 Kaenel 1990, 1994; Müller *et al.* 1999; Curdy *et al.* 2009; Curdy *et al.* 2010; Curdy *et al.* 2012.

17 Acsádi/Nemeskéri 1970; Bruzek 1991, 2002; Bruzek *et al.* 1996; Murail *et al.* 2005.

18 Schmitt 2001, 2005.

19 Schour/Massler 1941; Moorrees *et al.* 1963a/b; Scheuer/Black 2000; Schwartz 2007; Scheuer *et al.* 2009.

20 Crubézy/Sellier 1990.

21 Crubézy *et al.* 1999.

22 Barnes 2012.

23 Verna 2014.

24 Turner *et al.* 1991.

25 Scott/Turner 1997.

26 Alt 1997.

27 Alt/Türp 1997.

28 Hillson 1996; 2005.

29 Aufderheide/Rodriguez-Martin 1998.

30 Beauthier 2011.

31 Quatrehomme 2015.

32 Curdy *et al.* 2009; Curdy *et al.* 2010; Curdy *et al.* 2012.

33 The case of the other necropolises from Valais which are dated to the Second Iron Age (i. e. Sion-Petit Chasseur, Don Bosco, St-Guérin, Passage de la Matze, Ancienne et Nouvelle Placette, Rue de Lausanne, Sous-le-Scex, Crypte de la Cathédrale and Bramois-Pranoë) is discussed in depth in Curdy *et al.* 2009 and Hofstetter 2018. In this sense, this article deals only with the most recent ones to have been uncovered.

34 Mariéthoz *et al.* 2002; Mariéthoz/Paccolat 2005; Antonini 2007; Curdy *et al.* 2009.

35 Mariéthoz *et al.* 2002; Mariéthoz/Paccolat 2005; Antonini 2007; Hofstetter 2020.

Figure 1: Map of Southwestern Switzerland showing the location of the Late Iron Age necropolises mentioned in this manuscript. Randogne – Bluche is highlighted in blue, whilst Sion – Parking des Remparts is highlighted in red; the grey dots mark the location of the other mentioned necropolises. Source: Bundesamt für Topographie, modified by Tobias Hofstetter. 2017.

pits (2 metres in length, 1 metre in width and 1.5 metres in depth), following a northeast/southwest orientation and show little to no signs of surface markings. Corner stones are found in certain cases, possibly to stabilise the wooden monoxyl coffins into which the individuals were deposited. Furthermore, all individuals were found in a dorsal decubitus position, with their hands either folded over the pelvic region or stretched alongside the hipbones³⁶.

The main observable difference between these two necropolises is the spatial organisation of the graves, since in the Randogne – Bluche graves are loosely distributed (1 grave per 50 m²) over a 750 m² rectangular shaped area, whilst in Sion – Parking des Remparts, they are located close together (1 grave per 10 m²) on a square shaped area no bigger than 100 m². The other observable difference between these two necropolises is the variation in grave goods' frequency (the quantity of items per grave) and distribution (the quantity of graves equipped with grave

goods). In Randogne – Bluche, six graves are equipped with a total of 29 objects; most of which are of a decorative or luxury nature ($n = 15$), such as bronze arm and leg rings, followed by clothing accessories ($n = 6$), such as fibulas and belt buckles as well as ceramic vessels ($n = 3$) and some small unidentifiable metallic artifacts ($n = 5$). Conversely, in Sion – Parking des Remparts, eight graves are equipped with a total of 23 objects, which are primarily clothing accessories ($n = 15$), followed by decorative or luxury items and pieces ($n = 6$) and ceramic vessels ($n = 2$). Therefore, grave good frequency is higher in Randogne – Bluche, whereas grave good distribution is higher in Sion – Parking des Remparts. Crosschecking the distribution of grave goods with bioanthropological data evidenced that women, men and children were not given the same type or combinations of objects. Furthermore, this particular standardisation of the way in which grave goods were distributed amongst the deceased appears to be specific to certain Iron Age populations of southwestern Switzerland. This claim is supported by the

³⁶ Mariéthoz *et al.* 2002; Mariéthoz/Paccolat 2005; Antonini 2007.

Figure 2: Map of the Randogne – Bluche necropolis compiling bioanthropological, chronological and typological data for every buried individual. Source: Office des Recherches Archéologiques, modified by Tobias Hofstetter. 2017.

Figure 3: Map of the Sion – Parking des Remparts necropolis compiling bioanthropological, chronological and typological data for every buried individual. Source: Office des Recherches Archéologiques, modified by Tobias Hofstetter. 2017.

recurrence of this distribution scheme, which has been observed in numerous other Late Iron Age necropolises in this area (e.g. the Sion – Sous-le-Scex, Petit-Chasseur and Don Bosco funerary sites (Figure 4))³⁷. In typological terms, the study of these grave goods indicates the existence of an indigenous cultural signature, embodied by the presence of locally produced arm and leg rings known as “anneaux de cheville à tête de serpents” (which translates as “snake-headed leg-rings”) (Figure 5), as well as a particular form of indigenous ceramic production (Figure 6). However, hints of cultural exchanges with neighbouring regions also can be identified. The latter are evidenced by the fairly parallel evolution of fibulas and belt buckles, as well as their presence in graves on both the northern and southern flanks of the alpine mountainous ridge. Furthermore, the discovery of various Roman and/or northern Italian coins and ceramics in certain excavated graves (eg. grave number 2 (UTr4) at the Sion – Parking des Remparts necropolis, grave number 4 at the Sion – Petit-Chasseur

necropolis and the westernmost grave of the Sion – Don Bosco necropolis) also provides solid material evidence to support the existence of such cultural exchanges³⁸.

Bioanthropological data

Concerning the individuals unearthed in Randogne – Bluche (n = 13), bioanthropological analysis reveals a major sex imbalance. Males (n = 5) make up 40 % of the sample, whilst only one female individual has been identified. Likewise, one observes a complete absence of immature subjects; age at death among the adult population could not be more precisely defined (Figure 7). Palaeopathological analysis reveals a high occurrence rate of dental caries and abscesses (n = 6 individuals concerned), as well as bone fractures (n = 2 individuals concerned) and osteophytic

³⁷ Curdy *et al.* 2009; Curdy *et al.* 2010; Curdy *et al.* 2012.

³⁸ Antonini 2007; Curdy *et al.* 2009; Curdy *et al.* 2010; Curdy *et al.* 2012; Hofstetter 2018.

Figure 4: Composition showing two illustrative examples of Late Iron Age graves from Valais field drawings and photographs. Note the particular grave good set (ceramic to the back of the head, *fibulae* on torso and leg-rings) and its standardized distribution as well as the similar grave architecture and orientation. Note also that the ceramics are Roman productions. Source: Curdy *et al.* 2009, modified by Tobias Hofstetter. 2021.

Figure 5: Geographical distribution of different kinds of leg-rings, amongst which the typically local “Snake-headed leg-rings”. Source: Curdy *et al.* 2009.

activity on the axial skeleton ($n = 2$ individuals concerned). The study of non-metrical variation in both teeth and bones presents a homogeneous population within which specific subgroups cannot be defined more precisely.

Regarding the individuals unearthed in Sion – Parking des Remparts ($n = 12$), osteological analysis shows a similar overrepresentation of males ($n = 5$), accounting for 42 % of the population sample. Even so, females ($n = 2$) are slightly better represented than in the previous case. As far as age at death is concerned, one observes the presence of three immature subjects, ranging in age from 5 to 19 years, and nine adults, ranging in age from 20 to 59 years (Figure 8). Palaeopathological analysis points out the same predominance of dental caries and abscesses ($n = 7$ individuals concerned), and more generally speaking, rather poor oral hygiene. Non-specific metabolic stress markers³⁹ also have been observed, in the form of linear enamel hypoplasia ($n = 6$ individuals concerned), Harris lines on lower limb bones ($n = 5$ individuals concerned) and porotic hyperostosis of the orbital roof (known as *cribra orbitalia*) ($n = 3$ individuals concerned). Among these individuals, one half ($n = 3$) is affected by every enunciated stress marker⁴⁰. Furthermore, osteophytic activity on the axial skeleton, as well as isolated trauma lesions, was documented in three further individuals ($n = 3$).

An individual (PR06-T12-UT109) showing severe upper and lower limb dysplasia, associated with bilateral scapular osteochondropathy and a possible tibular osteochondrosis, was diagnosed with severe metabolic disorder, possibly a rare type of lysosomal storage disease or a form of pseudoachondroplasia resulting in severe and multiple skeletal dysplasia (Figure 9)⁴¹. As a side note, this individual illustrates the fact that Late Iron Age society, at least in some cases, cared for its most disadvantaged individuals. The pathologies of this individual in all likelihood would not have allowed him to live independently and yet he was granted a place in an “ordinary” necropolis and buried according to standard funerary practice. This is all the more noteworthy, since it is known that special burials existed, especially in the case of armed individuals; burials in which the deceased was buried in a procubitus position (lying on the face), which has been widely interpreted as a sign of social dishonour or disgrace⁴².

In general, the individuals in Sion – Parking des Remparts appear on average to have been less healthy than their counterparts in Randogne – Bluche. In terms of non-metrical variation, both in teeth and bones, this group again is very homogeneous, rendering it difficult to identify specific subgroups, and closely resembles the population buried in Sion – Parking des Remparts.

Antique textual sources

Antique textual sources represent the next dataset on Late Iron Age societies and their funerary rites considered in this study. This topic is relatively well documented, since different Antique authors, such as Caesar, Pausanias, Pliny the Elder, Livy and Strabo⁴³, provide cultural insights into southwestern Switzerland’s societies during the Late Iron Age. Even though not all of these written sources are primary in nature, and most surely depict a partially romanticised vision of these communities, a certain number of recurrences can be identified within this literary sample. Notably, they all point out the fact that what is known as present-day Valais, was populated by four different Celtic communities: the Nantuati in the far west; the Veragri in the west; the Seduni in the east; and the Uperi in the far east⁴⁴. By way of illustration, we present below Caesar’s description of southwestern Switzerland’s communities in his work *De Bello Gallico*.

“When Caesar was setting out for Italy, he sent Servius Galba with the twelfth legion and part of the cavalry, against the Nantuates, the Veragri, and Seduni, who extend from the territories of the Allobroges, and the lake of Geneva, and the River Rhône to the top of the Alps”

C. Iulius Caesar, *De Bello Gallico*, Book 3, Chapter 1 (Gilliver K, trans.)

It appears that although they share a common cultural background (described below) due to the fact that they all are part of the Celtic sphere, these communities tended to develop cultural specificities, which manifested in material (e. g. ceramic and decorative or luxury items productions) and immaterial ways (e. g. different ritual practices). However, these cultural specificities also tended to be partially overridden by the ongoing commercial exchanges that took place between these different communities and

³⁹ Hillson 1996, 2005; Aufderheide/Rodriguez-Martin 1998; Beauthier 2011; Quatrehomme 2015.

⁴⁰ Debard 2014; 2020; Debard *et al.* 2019.

⁴¹ Debard *et al.* 2014; oral communication (2020); Hofstetter 2018.

⁴² Curdy *et al.* 2009; Baray *et al.* 2010.

⁴³ Freeman 1994; Toynbee 1996; Birkhan 1997; Miguelez 1993; Curdy 2000; Collis 2003; Curdy *et al.* 2009; Kaenel 2009; Curdy *et al.* 2010.

⁴⁴ Müller *et al.* 1999; Curdy *et al.* 2009; Curdy *et al.* 2010.

Randogne-Bluche :***BL05-T20 (b)*****Grave goods :**

- Ceramic vessel
(indigenous type)

- Leg rings
(bronze)

- Fibula
(iron)

Inkprint : © C. Gaudillère (2006)

Figure 6: Drawing of the grave goods accompanying individual BL05-T20 (b), unearthed in Randogne – Bluche. Source: Office des Recherches Archéologiques, C. Gaudillère. 2006.

Figure 7: Sex and age distribution of the individuals unearthed in Randogne – Bluche. Source: Tobias Hofstetter. 2017.

Figure 8: Sex and age distribution of the individuals unearthed in Sion – Parking des Remparts. Source: Tobias Hofstetter 2017.

the southern Roman territories, as well as the northern regions of Europe⁴⁵.

Socially speaking, according to these Antique textual sources, Celtic society was patrilineal, strongly hierarchised and led by an aristocratic-like kinfolk. Based on these sources, it appears that the higher castes included, amongst others, a form of mystical leaders called “druids” and armed cavaliers (or “knights”), whilst the remaining majority of the population essentially was composed of farmers, artisans (e.g.: blacksmiths or potters) and slaves⁴⁶. In his *De Bello Gallico*, Casear presents druids as follows:

“Throughout all Gaul there are two orders of those men who are of any rank and dignity: for the commonality is held almost in the condition of slaves, and dares to undertake nothing of itself, and is admitted to no deliberation. The greater part, when they

are pressed either by debt, or the large amount of their tributes, or the oppression of the more powerful, give themselves up in vassalage to the nobles, who possess over them the same rights without exception as masters over their slaves. But of these two orders, one is that of the Druids, the other that of the knights. The former are engaged in things sacred, conduct the public and the private sacrifices, and interpret all matters of religion. To these a large number of the young men resort for the purpose of instruction, and they [the Druids] are in great honor among them. For they determine respecting almost all controversies, public and private [...]”

C. Iulius Caesar, *De Bello Gallico*, Book 6, Chapter 13 (Gilliver K, trans.)

Knights, as previously exposed have been archaeologically identified as such in a certain number of graves within Second Iron Age necropolises in the Alpine and peri-Alpine regions⁴⁷. They are generally well endowed with weapons and grave goods which suggests that they

⁴⁵ Kaenel 1994; Kaenel 2009; Müller *et al.* 1999; Curdy *et al.* 2009.

⁴⁶ Freeman 1994; Birkhan 1997; Müller *et al.* 1999; Curdy 2000; Collis 2003; Curdy *et al.* 2009; Kaenel 2009.

⁴⁷ Curdy *et al.* 2009.

Figure 9: Composition showing field and laboratory documentation of individuals BL05-T20 (b) from Randogne – Bluche, and pathological individual PR06-T12-UT109 from Sion – Parking des Remparts. Source Office des Recherches Archéologiques, modified by Tobias Hofstetter. 2017.

belonged to a form of social elite. In his work *De Bello Gallico*, Caesar presents these knights as follows:

“The other order is that of the knights. These, when there is occasion and any war occurs (which before Caesar’s arrival was for the most part wont to happen every year, as either they on their part were inflicting injuries or repelling those which others inflicted on them), are all engaged in war. And those of them most distinguished by birth and resources, have the greatest number of vassals and dependents about them. They acknowledge this sort of influence and power only.”

C. Iulius Caesar, *De Bello Gallico*, Book 6, Chapter 15 (Gilliver K, trans.)

Caesar also provides a detailed account of the patrilinear functioning of Celtic society, as well as the ranking of individuals according to their gender and social origin:

“Husbands have power of life and death over their wives as well as over their children: and when the father of a family, born in a more than commonly distinguished rank, has died, his relations assemble, and, if the circumstances of his death are suspicious, hold an investigation upon the wives in the manner adopted toward slaves; and, if proof be obtained, put them to severe torture, and kill them.”

C. Iulius Caesar, *De Bello Gallico*, Book 6, Chapter 19 (Gilliver K, trans.)

Thus, similarly to what is known about Roman culture, social thresholds based on gender and age also seem to exist in Celtic society⁴⁸. It appears that children and teenagers were granted an intermediate social status in com-

⁴⁸ Birkhan 1997; Buchsenschutz 2015.

parison to adults, who enjoy full citizenship, and very young subjects, to whom no ordinary social status was granted, at least when it came to funerary rights and tradition. Similar restrictions also probably applied to slaves⁴⁹.

Finally, the importance of funerals within Celtic society is also highlighted by Caesar. Furthermore, his description of Celtic funeral ceremonies offers an interpretative clue as to the purpose of grave goods dotation and textually reveals the existence of the practice of cremation in the Celtic communities (in addition to inhumation burials, which are the most frequently attested archaeologically speaking)⁵⁰:

“Their funerals, considering the state of civilization among the Gauls, are magnificent and costly; and they cast into the fire all things, including living creatures, which they suppose to have been dear to them when alive”

C. Iulius Caesar, *De Bello Gallico*, Book 6, Chapter 19 (Gilliver K, trans.)

Data analysis

An important preliminary observation to keep in mind is the small number of individuals unearthed, both in terms of the historical period and geographical area. A possible explanation for this phenomenon is the archaeological state of knowledge. Most of these necropolises were unearthed fortuitously during preventive fieldwork operations, and not according to a pre-elaborated prospecting plan, leaving a number of blank spots on the archaeological map. A second plausible explanation has to do with the socio-cultural nature of Late Iron Age communities, which may have guaranteed access to burial in a given necropolis only to a certain fraction of the population (a technicality known as funerary recruitment). Realistically, the phenomenon is likely attributable in part to both hypotheses. Nonetheless, this observation and its possible consequences should be kept in mind during the following analytical section⁵¹.

Even so, the archaeological and bioanthropological data, the strict similarities in grave architecture, funerary treatment, grave goods typology in both necropolises, as

well as biological proximity of the individuals indicate a possible link between the two sites at stake. If one looks at the same data collected in the contemporary surrounding necropolises in Valais, one observes again the same architecture, funerary practices, grave goods and biological proximity of the individuals, leaving one to conclude that the entirety of this corpus probably is the result of the funerary practices of a single community that occupied the western portion of Valais⁵². Furthermore, according to previous studies (Curdy *et al.* 2009; Curdy *et al.* 2012), certain leg rings found as grave goods in most of these necropolises, as well as their standardised allocation to women, men and children, seem to be a specific cultural marker for this region of Valais. Therefore, building on previously mentioned ancient historical data, we can go on to say that these necropolises probably all are the work of the Seduni community⁵³.

Further insight into Seduni funerary rites, and by extension, Seduni society, can be reached through analysing the differences observed between the two necropolises in question. Here, their respective geographical locations are of interest; the Randogne – Bluche necropolis is located at a high altitude on an isolated plateau, whilst Sion – Parking des Remparts necropolis is located at the bottom of the upper Rhône valley. If one compares these locations with those of the other Second Iron Age necropolises known in Valais, then it clearly appears that Randogne – Bluche is an exception; all other funerary sites are concentrated within a three-kilometre-wide circle. Other aspects, including the spatial organisation of the graves, which is loose in Randogne – Bluche and compact in the other necropolises, also confirm that Randogne – Bluche is an exception when compared to the other necropolises. Bioanthropologically speaking, it also is the necropolis showing the greatest deficit of both women and children. As far as grave goods are concerned, the individuals of Randogne – Bluche on average are endowed more richly than those in the other necropolises making up the locally currently known La Tène funerary corpus. Conversely, it is also the necropolis where richness is concentrated amongst the fewest individuals. Lastly, when it comes to occurrence of stress markers, the individuals from Randogne – Bluche are among the least stressed individuals of the currently known corpus. In addition to data obtained from the study of La Tène necropolises in Valais, results of a study conducted by Debard *et al.*⁵⁴ on the socio-economic conditions

⁴⁹ Freeman 1994; Toynbee 1996; Birkhan 1997; Müller *et al.* 1999; Collis 2003; Curdy *et al.* 2009; Kaenel 2009.

⁵⁰ Müller *et al.* 1999; Curdy *et al.* 2009; Debard 2020; Debard *et al.* 2019

⁵¹ Müller *et al.* 1999; Curdy *et al.* 2009; Curdy *et al.* 2010; Curdy *et al.* 2012.

⁵² Curdy *et al.* 2009; Curdy *et al.* 2012.

⁵³ Müller *et al.* 1999; Mariéthoz *et al.* 2002; Mariéthoz/Paccolat 2005; Antonini 2007; Curdy *et al.* 2009; Hofstetter 2018.

⁵⁴ Debard 2020; Debard *et al.* 2019.

of Late Iron Age communities in western Switzerland also should be considered. This study showed that individuals displaying the least amount of metabolic stress markers (in the form of Harris lines) and pathologies, were also the ones presenting the most wealth in terms of grave goods (mostly armed men and women entombed with coins, decorative or luxury items). Furthermore, a socio-gendered discrimination seems to have also existed⁵⁵.

In addition, the parallel consideration of Antique textual sources brings clarity to previously exposed archaeological and bioanthropological observations. Given the generally hierarchical nature of Late Iron Age society⁵⁶, one can advance the theory that the exceptional status of the Randogne – Bluche necropolis might be due to the existence of an identical social stratification system in the Celtic funerary world. Therefore, individuals buried in Randogne – Bluche, who on average appear wealthier and healthier than the rest of the surrounding population, probably belonged to the upper classes of the Late Iron Age society of southwestern Switzerland. It should be emphasised that the origins of this wealth probably lay in southwestern Switzerland's location on important trade routes connecting the regions north of the Alps to the Roman territories and commercial partners further afar. This wealth manifests itself amongst the local populations in the form of precious decorative or luxury grave goods (such as fibulae, arm and leg bracelets) and valuable imported goods (such as richly decorated ceramics)⁵⁷. Furthermore, the quasi-absence of immature and very young subjects (even though one would expect evidence of the very high infant mortality that characterised pre-vaccine societies) can be interpreted as being the result of the application of the social threshold system to the funerary world. Their civil status not being equivalent to that of older children, teenagers and adults, very young individuals had to be buried elsewhere. According to archaeological data gathered from Late Iron Age dwelling sites⁵⁸, very young subjects mainly seem to be buried in domestic contexts, whilst children and teenagers sometimes are buried in adult necropolises, as the Sion – Parking des Remparts necropolis perfectly illustrates. The latter observation also is substantiated by Debard *et al.*⁵⁹, who identified and analysed further child and teenager inhumation burials in the necropolises of both

Sion – Sous-le-Scex and Sion – Petit-Chasseur (as well as in necropolises situated outside of the geographical range of this research, such as Ollon – St-Triphon, Lausanne – Vidy and Bern – Engehalbinsel).

Conclusions and Outlook

In conclusion, we wish to reflect on the implications of further research into the previously discussed understanding of Late Iron Age society as seen through funerary rites in Southwestern Switzerland, as well as the broader chronological and geographical perspective.

Our data point to the existence of local specificities of funerary rites in southwestern Switzerland. Although all the data indicate that the studied population easily can be integrated and assimilated into the overall known panorama of Celtic society as a whole, they point to a specific set of material, bioanthropological and socio-cultural characteristics that enable us to distinguish the populations under study from neighbouring communities north and south of the Alps. Nevertheless, cultural influences from the same neighbouring communities also can be identified. Furthermore, it should be noted that similar studies on the same topic, mobilising notably isotopic analysis, undertaken on Early to Late Iron Age necropolises from the northern Alpine flank tend to show similar results and further hint at the importance of armed cavaliers and other affluent members within Celtic society⁶⁰.

On the whole, such studies, including the present article, tend to show the complex dynamics linking the evolution of social practices and society as a whole. This further demonstrates the need for a broad multidisciplinary analysis of social phenomena, as well as the importance of considering, whenever possible, corpuses in adjoining areas, in order to define the socio-cultural constants of a given region.

Acknowledgement of this fact is of central importance, since Late Iron Age continental Europe still tends to be dichotomised into two homogeneous yet antagonistic realms; that of civilisation, embodied by Roman culture, and that of the barbarian world, embodied mostly by Celtic culture⁶¹. As this study demonstrates, there is a lot of space for local specificities within these two antagonistic realms, some of which still are archaeologically observable today. Therefore, the most significant point brought

⁵⁵ Debard 2020.

⁵⁶ Birkhan 1997; Müller *et al.* 1999; Curdy *et al.* 2010; Moghaddam *et al.* 2016; Moghaddam *et al.* 2018.

⁵⁷ Kaenel 1994; Curdy *et al.* 2009; Curdy *et al.* 2010; Curdy *et al.* 2012.

⁵⁸ Müller *et al.* 1997; Curdy *et al.* 2009; Blaizot *et al.* 2003.

⁵⁹ Debard 2020; Debard *et al.* 2019.

⁶⁰ Kaenel 1994; Scheeres 2014; Moghaddam *et al.* 2016; Moghaddam *et al.* 2018.

⁶¹ Birkhan 1997; Thurston 2009.

forward by this case study is that apparent socio-cultural unity within a given area does not *de facto* mean that every population within the considered area necessarily has exactly the same cultural specificities⁶². Rather, one should understand socio-cultural unity as being the equilibrium between the shared cultural background noise of human communities living close to each other and the expression of their own cultural specificities⁶³.

Acknowledgements: We wish to thank the Office des Recherches Archéologiques du Valais (ORA), in particular Dr Caroline Brunetti and Dr François Wibl, for letting us work on the individuals found in these two necropolises and for encouraging us to publish this case study. Furthermore, we wish to thank Dr Julie Debard for sharing her knowledge on the subject. Our gratitude also goes to the companies ARIA SA, TERA s..r.l and Archeodunum SA, who led the excavation of the two presented necropolises and granted us access to their field documentation. The authors are also most grateful to Philippe Curdy, Katya Kruglak, Jenny and Peter Veenendaal, Imane Achouche as well as Dr Daniel Hofstetter for their careful proofreading of this manuscript. This article is meant as a tribute to our deceased colleague Prof Dr Gilbert “Auguste” Kaenel; his encyclopaedical knowledge and relevant insights into Late Iron Age societies will be very much missed in the field of Swiss and European Protohistory.

References

- Acsdi/Nemeskri 1970: G. Acsdi/J. Nemeskri, History of Human Lifespan and Mortality (Budapest 1970).
- Alt 1997: K. W. Alt, Odontologische Verwandtschaftsanalyse: Individuelle Charakteristika der Zhne in ihrer Bedeutung fr Anthropologie, Archologie und Rechtsmedizin (Stuttgart 1997).
- /Trp 1997: –/J. C. Trp, Dental Anthropology. In: K. W. Alt/C. L. Brace/J. C. Trp (eds), The History of Dental Anthropology (Stuttgart 1997) 15–39.
- Antonini 2007: A. Antonini, Sion, Place et Rue des Remparts. Annuaire d’Archologie Suisse 90/197, 2007.
- Aufderheide/Rodriguez-Martin 1998: A. C. Aufderheide/C. Rodriguez-Martin, The Cambridge Encyclopedia of Human Paleopathology (Cambridge 1998).
- Barnes 2012: E. Barnes, Atlas of Developmental Field Anomalies of the Human Skeleton: A Paleopathology Perspective (New York 2012).
- Baray *et al.* 2010: L. Baray/B. Boulestin/A. Gallay, Morts anormaux et spultures bizarres: questions d’interprtations en archologie funraire: actes du colloque de Sens (29 mars –1er avril 2006) (Dijon 2010).
- Beauthier 2011: J.-P. Beauthier, Trait de mdecine lgale (Brussels 2011).
- Birkhan 1997: H. Birkhan, Kelten: Versuch einer Gesamtdarstellung ihrer Kultur (Vienna 1997).
- Buchsenschutz 2015: O. Buchsenschutz (dir.), L’Europe celtique l’ge du Fer (Paris 2015).
- Bruzek 1991: J. Bruzek, Fiabilit des procds de dtermination du sexe partir de l’os coxal. Implications l’tude du dimorphisme sexuel de l’homme fossile. Doctoral thesis (Musum d’Histoire Naturelle, Paris 1991).
- 2002: –, A Method for Visual Determination of Sex, Using the Human Hip Bone. American Journal of Physical Anthropology 117/2, 2002, 157–168. DOI: 10.1002/ajpa.10012
- *et al.* 1996: –/D. Castex/T. Majo, Evaluation des caractres morphologiques de la face sacro-pelvienne de l’os coxal: Proposition d’une nouvelle mthode de diagnose sexuelle. Bulletins et Mmoires de la Socit d’Anthropologie de Paris 8/3–4, 1996, 491–502. DOI: 10.3406/bmsap.1996.2465
- Caesar (Gilliver, transl.) 2002: C. J. Caesar, Caesar’s Gallic Wars (K. Gilliver, transl.; Oxford 2002).
- Collis 2003: J. Collis, The Celts: Origin, Myths and Inventions (Stroud 2003).
- Crubzy/Sellier 1990: E. Crubzy/P. Sellier, Caractres discrets et organisation des ensembles spulcraux. Bulletins et Mmoires de la Socit d’Anthropologie de Paris 2/3–4, 1990, 171–177. DOI: 10.3406/bmsap.1990.1756
- *et al.* 1999: –/N. Telmon/A. Sevin/J. Picard/D. Roug/G. Larrouy/J. Braga/B. Ludes/P. Murail, Micro-evolution of Historic Populations: Study of Discrete Traits of the Population of Missiminia (Sudan, IIIrd–VIth Century A.D.). Bulletins et Mmoires de la Socit d’Anthropologie de Paris, nouvelle srie 11/1–2, 1999, 1–213.
- Curdy 2000: P. Curdy, Le Valais, les Ubres et les Lpontiens: Au premier ge du Fer, deux territoires distincts dans la valle du Rhne. In: R. De Marinis/S. Biaggio-Simona (eds), I Leponti tra mito e realt. (Locarno 2000) 173–178.
- /Kaenel 2006: –/G. Kaenel, Les Celtes de l’ge du Fer. In: A. Gallay, Des Alpes au Lman: Images de la prhistoire (Gollion 2006) 261–325.
- Curdy *et al.* 2009: P. Curdy/F. Marithoz/L. Pernet/A. Rast-Eicher, Rituels funraires chez les Sdunes: les ncropolises du Second ge du Fer en Valais central (IV^e–I^{er} sicle av. J.-C.). Cahiers d’Archologie Romande 112/3 (Lausanne 2009).
- *et al.* 2010: –/–/–, Pratiques funraires en territoire sdune du IVE au Ier sicle av. J.-C. In: P. Barral/B. Dedt/F. Delrieu/P. Giraud/I. Le Goff/S. Marion/A. Villard-le Tiec, Gestes funraires en Gaule au Second ge du Fer – Actes du XXXIII^e colloque international de l’AFEAF (Caen, 20–24 mai 2009) (Besanon 2010).
- Curdy *et al.* 2012: P. Curdy/P. Jud/G. Kaenel, Chronologie de la fin de La Tne en Suisse occidentale, partir des fibules issues de contextes funraires (49–64). In: P. Barral/S. Fichtl (eds), Regards sur la chronologie de la fin de l’ge du Fer (III^{me}–I^{er} sicle avant notre re) en Gaule non-mditerrannenne (Bibracte 2012).
- Debard 2014: J. Debard, Approche bioanthropologique des conditions socio-conomiques la fin de l’ge du Fer en Suisse occidentale: stature, croissance et stress environnemental. Unpublished master thesis (University of Geneva 2014).

⁶² Miguelez 1997.

⁶³ *Ibid.*

- 2020: –, Les conditions socio-économiques pendant l'âge du Fer en Suisse occidentale: intégration des paramètres archéologiques, bioanthropologiques, paléopathologiques et paléoalimentaires. Unpublished doctoral thesis (University of Geneva 2020).
- *et al.* 2014: –/F. Mariéthoz/M. Besse, A Late Iron Age Case of Mucopolysaccharidosis in a Young Adult Male from Sion Parking-Remparts (Valais, Switzerland). 16th Annual Conference of the BABAO (Durham 2014).
- *et al.* 2019: –/G. Kaenel/G. Perréard Lopreno/J. Desideri/M. Besse, Conditions socio-économiques au Second âge du Fer en Suisse occidentale. *Annuaire d'Archéologie Suisse* 102, 2019, 45–56.
- Freeman 1994: P. M. Freeman, *The Earliest Classical Sources on the Celts: A Linguistic and Historical Study* (Cambridge 1994).
- Gallay 2011: A. Gallay, *Pour une ethnoarchéologie théorique* (Arles 2011).
- Hillson 1996: S. Hillson, *Dental Anthropology* (Cambridge 1996). DOI: <https://doi.org/10.1017/CBO9781139170697>
- 2005: –, *Teeth* (Cambridge 2005). DOI: <https://doi.org/10.1017/CBO9780511614477>
- Hofstetter 2018: T. Hofstetter, *Étude paléoanthropologique et analyse des rituels funéraires de deux sites laténiens valaisans: Randogne – Bluche et Sion – Parking des Remparts* (Oxford 2018).
- 2020: –, Comportements funéraires sur le territoire suisse entre le 1^{er} siècle avant notre ère et le 6^{ème} siècle de notre ère: Vestiges matériels, sources textuelles et inscriptions funéraires. Unpublished Master thesis (University of Neuchâtel 2020).
- Kaenel 1994: G. Kaenel, *Objets, Parures, Société, Politique ... L'exemple de l'âge du Fer*. *Bulletin du Centre Genevois d'Anthropologie* 4, 1994, 23–41.
- 2009: –, *The Archaeology and History of Ancient Switzerland: Recent Developments*. *La Lettre du Collège de France* 4, 2009, 28–29. DOI: <https://doi.org/10.4000/lettre-cdf.758>
- Mariéthoz 2011: F. Mariéthoz, *Rapport d'activité: Sion, la nécropole de Don Bosco (années 2007–2010)* (Sion 2011).
- /Paccolat 2005: –/O. Paccolat O, *Les sépultures à inhumation de la Tène finale (Randogne – Complexe “Bluche 2000”)* (Unpublished excavation report).
- *et al.* 2002: –/C. Senn/C. Brunetti, *Rapport préliminaire: fouille de “Bluche 2000”, extérieur Sud, bâtiment A* (Unpublished excavation report 2002).
- Migueluez 1993: R. Migueluez, *L'émergence de la sociologie* (Ottawa 1993).
- Moghaddam *et al.* 2016: N. Moghaddam/F. Müller/A. Hafner/S. Lösch, *Social Stratigraphy in Late Iron Age Switzerland: Stable Carbon, Nitrogen and Sulphur Isotopes Analysis of Human Remains from Münsingen*. *Archaeological and Anthropological Sciences* 8, 2016, 149–160. DOI: [10.1007/s12520-014-0221-4](https://doi.org/10.1007/s12520-014-0221-4)
- *et al.* 2018: –/–/S. Lösch, *A Bioarchaeological Approach to the Iron Age in Switzerland: Stable Isotope Analyses ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$ and $\delta^{34}\text{S}$) of Human Remains*. *Archaeological and Anthropological Sciences* 10, 2018, 1067–1085. DOI: [10.1007/s12520-016-0441-x](https://doi.org/10.1007/s12520-016-0441-x)
- Moorrees *et al.* 1963a: C. F. A. Moorrees/E. A. Fanning/E. E. Hunt, *Age Variation of Formation Stages for Ten Permanent Teeth*. *Journal of Dental Research* 42, 1963, 1490–1502. DOI: [10.1177/00220345630420062701](https://doi.org/10.1177/00220345630420062701)
- *et al.* 1963b: –/–/–, *Formation and Resorption of Three Deciduous Teeth in Children*. *American Journal of Physical Anthropology* 21, 1963, 205–213. DOI: [10.1002/ajpa.1330210212](https://doi.org/10.1002/ajpa.1330210212)
- Müller *et al.* 1999: F. Müller/G. Kaenel/G. Lüscher, *Eisenzeit – Âge du Fer – Età del Ferro. La Suisse du Paléolithique à l'aube du Moyen-Âge* (vol. 4, Âge du Fer) (Basel 1999).
- Murail *et al.* 2005: P. Murail/J. Bruzek/F. Houët/E. Cunha, *DSP: Un outil de diagnose sexuelle probabiliste à partir des données métriques de l'os coxal*. *Bulletins et Mémoires de la Société d'Anthropologie de Paris* 17/3–4, 2005, 167–176.
- Piguet 2011: M. Piguet, *Les sites du Néolithique moyen valaisan*. In Besse M, Piguet M. *Le site préhistorique du Petit-Chasseur (Sion, Valais) 10. Un hameau du Néolithique moyen*. CAR 124/6 (Lausanne 2011).
- Quatrehomme 2015: G. Quatrehomme, *Anthropologie medico-légale* (Brussels 2015).
- Scheeres 2014: M. Scheeres, *High Mobility Rates during the Period of the “Celtic Migrations”? $^{87}\text{Sr}/^{86}\text{Sr}$ and $\delta^{18}\text{O}$ evidence from Early La Tène Europe*. Doctoral Thesis (Johannes Gutenberg-Universität Mainz 2014).
- Scheuer/Black 2000: L. Scheuer/S. Black, *Developmental Juvenile Osteology* (Amsterdam 2000).
- Schmitt 2001: A. Schmitt, *Variabilité de la senescence du squelette humain. Réflexions sur les indicateurs de l'âge au décès: à la recherche d'un outil performant*. Doctoral thesis (Université de Bordeaux 2001).
- 2005: –, *Une nouvelle méthode pour estimer l'âge au décès des adultes à partir de la surface sacro-pelvienne iliaque*. *Bulletins et Mémoires de la Société d'Anthropologie de Paris*, nouvelle série 17/1–2, 2005, 89–101.
- Schour/Massler 1941: I. Schour/M. Massler, *The Development of the Human Dentition*. *Journal of the American Dental Association* 28, 1941, 1153–1160.
- Schwarz 2007: J. H. Schwarz, *Skeleton Keys: An Introduction to Human Skeletal Morphology* (Oxford 2007).
- Scott/Turner 1997: G. R. Scott/C. G. Turner, *The Anthropology of Modern Human Teeth: Dental Morphology and its Variation in Recent Human Populations* (Cambridge 1997).
- Thurston 2009: T. Thurston, *Unity and Diversity in the European Iron Age: Out of the Mists, Some Clarity?* *Journal of Archaeological Research* 17/4, 2009, 347–423. DOI: [10.1007/s10814-009-9032-z](https://doi.org/10.1007/s10814-009-9032-z).
- Toynbee 1996: J. M. C. Toynbee, *Death and Burial in the Roman World* (Baltimore 1996).
- Turner *et al.* 1991: C. G. Turner (II)/C. R. Nichol/C. G. Scott, *Scoring Procedures for Key Morphological traits of the Permanent Dentition: The Arizona State University Dental Anthropology System*. In: M. A. Kelley/C. S. Larsen (eds), *Advances in Dental Anthropology* (New York 1991) 13–31. DOI: [10.1002/ajhb.1310030624](https://doi.org/10.1002/ajhb.1310030624)
- Verna 2014: E. Verna, *Les variations osseuses asymptomatiques du squelette postcrânien: leur contribution à l'identification en anthropologie medico-légale* (Doctoral thesis Université d'Aix-Marseille 2014).