rieure contraignante. Revenons à Tacite, Germania, XVI, 2: « vicos locant non in nostrum morem conexis, et cohaerentibus aedificiis: suam quisque domum spatio circumdat, sive adversus casus ignis remedium sive inscientia aedificandi ». L'urbaniste français P. Pinon, après avoir écouté une intervention que je faisais à Tours sur les villes de l'âge du Fer, m'avait objecté que dans sa définition de la ville, les maisons sont maisons mitoyennes. Si c'est le cas pour les quartiers artisanaux des oppida, les nobles au contraire transfèrent dans des enclos le plan de leurs résidences rurales qu'ils transforment peu à peu, comme on le voit à Bibracte, en habitations à la mode romaine soigneusement isolées de leurs voisines.

Ce colloque nous montre ainsi la voie à suivre aujourd'hui: oublier un moment les modèles théoriques, analyser le contexte géographique et historique, multiplier les prospections géophysiques et les fouilles de contrôle, décortiquer les plans sans a priori, relire encore une fois les textes. Et malgré toutes les nuances qui ont été judicieusement ajoutées au modèle traditionnel de la « Civilisation des oppida », il reste évident à notre avis que la création en une ou deux décennies de plusieurs centaines de vastes villes de hauteur fortifiées repose sur un projet délibéré et avant tout politique, probablement conduit par les aristocrates: concentrer, défendre et contrôler l'énergie et la richesse des artisans et des commerçants, tout en maintenant leur domination sur les paysans par le maintien d'un réseau dense de résidences rurales.

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Christoph Steffen, Gesellschaftswandel während der älteren Eisenzeit. Soziale Strukturen der Hallstatt- und Frühlatènekultur in Baden-Württemberg. Materialhefte zur Archäologie in Baden-Württemberg, volume 93. Konrad Theiss, Stuttgart 2012. € 22.00. ISBN 978-3-8062-2699-7. 202 pages and 1 CD-ROM.

The book under review is the PhD thesis of the author accepted by the Christian-Albrechts-University Kiel in 2011. Together with the culture-geographic approach of O. Nakoinz (Archäologische Kulturgeographie der ältereisenzeitlichen Zentralorte Südwestdeutschlands. Universitätsforsch. Prähist. Arch. 224 [Bonn 2013]) and the dissertation in preparation by M. Steffen (Siedlungsstrukturen und Siedlungshierarchien während der späten Hallstatt- und frühen Latènezeit in Baden-Württemberg), both of which geared more towards settlement archaeology, it represents the analysis of a body of data which hardly finds an equal in Central Europe. As part of the DFG priority programme 1171 "Early centralisation and urbanisation processes: the genesis and development of early Celtic princely seats and its territorial environs", the subproject "Settlement hierarchy, cultural regions, social evolution and territoriality from the 8th to the 4th century BC in Southwestern Germany" had the objective to build a database gathering all published and unpublished data available regarding the Early Iron Age in Baden-Württemberg.

Unlike the two studies mentioned above, the present publication primarily pursues a social-archaeological approach. The goal is "to develop and test, to reject if necessary, to confirm or expand hypotheses about the structure of Early Celtic societies" (p. 19 f.). The author addresses sex and age ("biologically determined factors"), the horizontal and vertical structure of Early Iron Age societies ("cultural factors"), and synchronic and diachronic comparisons as well as natural landscape determinants ("geography and time").

Spatially, the work is strictly limited to the focus of the database, i. e. Baden-Württemberg. Chronologically, it comprises both the older (= Ha C) and the younger Hallstatt period (= Ha D) as well as the Early La Tène period (= Lt A and B).

The book is divided into five major sections: The introduction with the presentation of the research questions (pp. 13–25) is followed by a discussion of the data base (pp. 27–36). Then, the methods used are presented (pp. 37–44), followed by their appliance to the material (pp. 45–156) – consequently by far the largest chapter. The book is completed by a summary and synthesis (pp. 157–170). The final report on the genetic analysis of individuals from the cemeteries of Asperg "Grafenbühl", Ludwigsburg "Hirschlanden" and Mühlacker "Heidwäldle" is reprinted as Appendix A (pp. 179–183), and the results are also discussed in an excursus (pp. 171–174). While the amplification of nuclear DNA was not successful, only that of mtDNA succeeded. Interestingly, none of the individuals showed the same haplotype, which is interpreted by the authors E. Lee and N. v. Wurmb-Schwark as an indication of a great diversity of maternal lineages.

The book is completed by a German and English summary (pp. 175–177) as well as a bibliography (pp. 185–202). In addition to these 202 pages, a CD-ROM is provided, containing a PDF file with 408 pages comprising lists, supplementary images as well as a 312 page long catalogue. As the information given in the PDF file is not necessary for understanding the text, the slimming down of the book is to be welcomed. However, it is foreseeable that in a few years PCs or laptops with CD-ROM drive will be rare, rendering the reading of the file problematic if not impossible. From the perspective of the reviewer in such and similar cases the publisher is in an obligation to ensure the long term availability of such files via a permanent internet link.

Apart from a few linguistic lapses, the work reads fluidly. The decidedly statistical approach, however, requires high attention from the reader. The reproduction of the results is cumbersome, but potentially possible. Factual errors are rather the exception.

The theoretical foundation and the methodology applied is based on the approach of the guiding spirit of the work, Oliver Nakoinz. Consequently, the author follows Nakoinz in borrowing the culture concept of the Americanist K. P. Hansen (Kultur und Kulturwissenschaft. Eine Einführung [Tübingen, Basel 2000]), which conceives culture as a set of collective standardisations. "Culture" and, on a generalised level, every social group is seen as a statistical parameter, which in principle is also archaeologically accessible through the identification of feature combinations. Key tools for the analysis are explorative methods of multivariate statistics, particularly cluster and canonical correspondence analysis.

The focus of the work lies less on identifying regional phenomena, but on recognising "spatially overlapping social groups" (p. 25). The aim is to render plausible that some groups can be interpreted – via symbols of status or correlation with biotic factors – as an expression of collective identity. However, the subsequent conclusion of the author, who understands such reconstructed collective identities as social actors, seems problematic in the eyes of the reviewer. This concept is not too far away from the old cultural-historical conception of cultures as the acting individuals of history.

The overview of the underlying data (p. 27 ff.) shows that for a total of about 500 burial places relevant information was available. Furthermore, the data base includes about 1 000 records that can be equated with grave mounds, and these in turn contained about 2 000 graves. These are usefully divided into four time slots: Ha C (unfortunately called "middle Hallstatt period"), Ha D1, Ha D2/3 and Lt A/B. As a whole, they contain a total number of about 20 000 objects. Ultimately, these grave goods form the foundation of the present work. They are classified and analysed mainly by material and form / function.

Due to the structure of the database, the resulting data set is, strictly speaking, not a contingency matrix, since one and the same object can enter the analysis more than once. For example, a gold neck ring is considered as a "neck ring" as well as a "gold neck ring"; moreover, the material "gold" itself is a further separate entity of the analysis (p. 39).

Since gender reassignments of individual burials are essential for social analysis, the likelihood of each type of object to be specific for a certain gender is calculated on the basis of existing anthropological sex determinations, ensued by the results being reapplied to the graves (p. 45 ff.). The procedure itself is very stringent, it does not consider, however, that in anthropological practice males and females are (mis)classified unequally (S. Burmeister / N. Müller-Scheessel, Der Methusalemkomplex. Methodologische Überlegungen zu Geschlecht, Alter und Sozialstatus am Beispiel der Hallstattzeit Süddeutschlands. In: J. Müller [ed.], Alter und Geschlecht in ur- und frühgeschichtlichen Gesellschaften [Tagung Bamberg 2004]. Universitätsforsch. Prähist. Arch. 126 [Bonn 2005] 91–125). The assignments contain no surprises and correspond to what is known for the Hallstatt and Early La Tène periods (for example, weapons are alloted to "male" graves, jewellery to "female" ones). The diachronic inspection shows that between time slices hardly any fundamental changes in the style of costume can be noted (p. 48 ff.).

An important tool for the comparison of graves is the scale of wealth ("Reichtumsindex"), which is based on the grave goods; a similar approach has already been used in other works. In order to obtain a data set as large as possible, information is formulated very coarse in the study at hand, whereby more detailed characterisations like the construction or weight of the objects could not be taken into account. The index is derived from the square root of the product of diversity and exclusivity of grave goods. Diversity is defined as normalised number of types in a particular grave, exclusivity as normalised sum of the proportions of a certain type in a grave in relation to the total number of this type in all graves. This approach is not only applied to the graves, but also serves to analyse the extent to which certain types of objects were either limited to specific areas of the wealth scale or were ubiquitous. It is also examined how the wealth index changes spatially and diachronically.

Only at the end of the study (p. 167) the background of this approach is articulated clearly; it is carried by the belief that the difference in investment volume of material resources in the graves can be considered as a proxy for the material wealth of the mourners and the deceased. Although referred trendily as "proxy", this approach in principle corresponds to the old adage of "graves as a mirror of life".

The wealth scale calculated for all graves together reaches its maximum span during Ha D2/3 – being particularly valid for male burials, while somewhat limited for female individuals; in Early La Tène it decreases even below the value of time slice 1 (Ha C).

This first evaluation is followed by an examination of the connection of certain types of objects in regard to age and sex. The juxtaposition of expectation and observation values in curve diagrams is helpful as it allows a quick overview over the distribution of burial goods in terms of age and gender. The diagrams are accompanied by chi² or Fisher's exact tests; however, despite attractive distribution images, in many cases these tests do not turn out to be significant. The question must be asked, whether these nominally scaled tests were the optimal choice, as age represents an ordinally scaled variable. This information is neglected by the tests used. In the eyes of the reviewer a Kolmogorov-Smirnov test, for example, would have been more appropriate, even if in general it is judged to be less powerful.

The analysis shows a strong age-dependent component, meaning that both male and female transitions to adulthood were obviously accompanied by a substantial replacement of ornaments

and personal equipment. A canonical correspondence analysis (p. 59 ff.), taking age and sex as canonical variables, also confirms the well-known fact that certain objects apparently could only be "acquired" with a certain age, especially gold neck rings and daggers: age was not a sufficient, but a necessary condition to achieve certain social vertical positions and their material symbols (p. 60).

Subsequently, each time slice and gender group is analysed, in each case preceded by a separate cluster analysis (p. 60 ff.). To determine these groups, a simplified classification of only binary coded types is used. As algorithm of classification, a hierarchical cluster analysis is carried out, the results being visualised by various means. Canonical correspondence analyses are used to investigate the possible dependence of certain types on age and gender and to analyse regional developments.

For Ha C male graves, only the separation between armed and unarmed individuals succeeds. Then, the cluster groups are compared in terms of the average value of the wealth scale. Clusters with significantly lower or higher wealth index values are singled out. They form the basis of the author's assumption of a vertical hierarchy ranging for the "warriors" from the men with lances to those with swords and finally to persons with carts as well as swords, and ranging for the unarmed from "farmers" (individuals solely equipped with ceramic vessels) to cart drivers. For women, the same approach leads to a ranking of individuals endowed with vessels alone over those with bracelets to those possessing a combination of bracelets, earrings and finger rings to persons with dress pins and finally to those additionally equipped with pearls. The author denotes the resulting hierarchy as rather flat (p. 79).

Subsequently, this procedure is repeated for the time slices Ha D1, Ha D2/3 and Lt A/B. In principle, similar groups show up; however, up to Ha D 2/3 their "distance" in rank in terms of the wealth scale grows. The author concludes that increasing processes of hierarchisation and a growing social gap between "poor" and "rich" were effective. While in time slots 1 and 2 a juxtaposition of unarmed and armed men existed, the former are not visible in time-slice 3 anymore. The author deduces a decline of the social value of the unarmed set here (p. 100 f.). He does not want to see this process as a chronological, but as a social phenomenon, which is based mainly on conservative burial customs in the "poorer" population and, thus, on typologically incorrect dates: unarmed men were in his view to a large extent assigned to a previous time slice due to typological (mis)classification of objects (p. 102). As stated here and later (p. 170), the author sees the social elites as particularly innovative, since they had to delineate themselves from the lower-ranking groups and also had the widest-reaching contacts.

With time slot 4 the process of hierarchisation comes to a standstill: in Early La Tène most male individuals represent "warriors", the author cannot observe any significant vertical hierarchy anymore; the same is true for women's graves, so for this period the author assumes a much lower social complexity. For him, this finding reflects a genuine process of social devolution; in his view the complex centres have shifted to the north to the area of Early La Tène "princely tombs" (p. 113).

In a final step of the study, the cluster groups determined by the author are projected into space and analysed by means of distribution maps (p. 117 ff.). The presence of prominent graves is discussed in the context of hypothetical communication and transport routes, the quality of soil and natural resources (especially salt and iron ore), however, an impression of arbitrariness and circularity arises: because "elite" graves are seen as evidence for hierarchisation processes, the potential for prosperity in the neighbourhood of richly furnished graves "must" necessarily have been present. It is hardly surprising that the regions showing the known 'princely graves' appear particularly prosperous. Referring to an earlier article (M. Steffen / N. Müller-Scheessel, Siedlungssysteme

der Späthallstattzeit in Baden-Württemberg. Modellierung des sozio-ökonomischen Potentials ältereisenzeitlicher Siedlungskammern auf Basis siedlungs- und sozialarchäologischer Kennzahlen. In: D. Krauße [ed.], "Fürstensitze" und Zentralorte der frühen Kelten. Abschlusskolloquium des DFG-Schwerpunktprogramms 1171 in Stuttgart, 12.–15. Oktober 2009. Forsch. u. Ber. Vor- u. Frühgesch. Baden-Württemberg 120,II [Stuttgart 2010] 333–357), a connection between prosperity (= rich graves) and natural or ecological conditions is drawn (p. 169 f.). The author of the study at hand sees favourable agrarian conditions as a basic requirement for the initialisation of processes of hierarchisation.

In connection with the conspicuous accumulation of Late Hallstatt and Early La Tène graves in certain regions, the author again raises the question of a possible temporal overlap between the end of the Hallstatt and the beginning of the Early La Tène period (p. 154 ff. with fig. 83). Ultimately, a certain time overlap between the earliest La Tène graves in the north and the latest Ha D 3 graves in the southern zone is considered probable by the author (p. 155).

Summarising, he discusses the question of craft specialisation among others (p. 158 ff.), but sees no indication for this. Only certain roles were displayed in male burial custom, while women were limited to their reproductive function.

The study at hand cannot overcome the problem that wealth indices always produce a continuous spectrum. Despite all attempts to objectify the limits of groups, these remain arbitrary. In addition, the cluster groups and the wealth scale are not really independent of each other, as they are both merely based on different encodings of the same objects. Finally, the work depends on the *a priori* that in social as well as spatial and diachronic terms the grave-goods are valid markers for material wealth and are thus immediately translatable into social differences and social complexity. This consistently positivistic approach must seem a bit strange for anybody who has come into contact with post-processual ideas. Although the author recognisably refrains from the interpretation of the 'princely graves', he reinforces the traditional image of very strong social divisions.

The fundamental problem of how far graves represent a direct reflection of prehistoric realities still exists. The author sees his approach underpinned mainly by the relationship between the occurrence of 'princely graves' and areas of high soil quality (p. 169). His dilemma, however, is revealed by the fact that he is hiding another essential argument in a footnote (p. 146 note 281): Pertaining to a regional study by I. BALZER (Neue Forschungen zu alten Fragen. Der früheisenzeitliche 'Fürstensitz' Hohenasperg [Kr. Ludwigsburg] und sein Umland. In: D. Krauße [ed.], 'Fürstensitze' und Zentralorte der frühen Kelten. Abschlusskolloquium des DFG-Schwerpunktprogramms 1171 in Stuttgart, 12.–15. Oktober 2009. Forsch. u. Ber. Vor- u. Frühgesch. Baden-Württemberg 120,I [Stuttgart 2010] 209–238), revealing an increase of the amount and quality of finds from Ha D1 to Ha D2/3, he concludes that the observed congruence with the development of the graves shows that this evidence not only results from changes in burial customs (i. e. in the religious sphere), but can be used as a proxy for the overall economic prosperity of a region. Such a far-reaching conclusion based on a very limited regional study is certainly problematic.

In terms of content, the book must be measured in particular by the results of Stefan Burmeister (Geschlecht, Alter und Herrschaft in der Späthallstattzeit Württembergs. Tübinger Schr. Ur- u. Frühgeschichtl. Arch. 4 [Münster, New York 2000]). Although time period and space are broader than studied by Burmeister, the number of analysable graves has not increased very much. Furthermore, it is known that age and gender were important structuring principles of Early Iron Age society at least since Burmeister's work. The spatial patterning of the hierarchisation process

largely corresponds to the known geographic distribution of 'princely graves'. In this respect, the analyses of the present work produce very limited new results.

From the reviewer's perspective, the most interesting aspects of the study at hand are those confronting the author with the greatest problems. This, for example, is true for the apparent "disappearance" of male graves without weapons in time slot 3. His hypothesis that this is primarily a social phenomenon based on the differing innovativeness of the relevant social groups is bold. However, it is not convincing since the chronology of Ha D mainly rests on fibulae not offering themselves as distinctive features. There is also the question why this explanation should not apply to the apparent devolution in transition to the Early La Tène period as well. Similarly, the spatial exclusion of Late Hallstatt and Early La Tène grave goods is in need of explanation. While it is apparent why the author did not pursue these issues further as they weaken his approach significantly, they should be taken up increasingly by future research.

A meta-analysis of the various quantitative approaches of recent years exploring Early Iron Age societies, both in terms of the power of the methods used as well as the results achieved (Burmeister 2000; the book under review here; Ch. Keller, Die Rekonstruktion sozialer Gruppen der Hallstattzeit zwischen Enns und Donau. Eine statistische Analyse. Berliner Arch. Forsch. 14 [Rahden / Westf. 2015]; R. Schumann, Status und Prestige in der Hallstattkultur. Aspekte sozialer Distinktion in ältereisenzeitlichen Regionalgruppen zwischen Altmühl und Save. Münchner Arch. Forsch. 3 [Rahden / Westf. 2015]), would undoubtedly be interesting. The book by Ch. Steffen has brought the quantitative approach with a wealth scale based on the scale and diversity of gravegoods in order to analyse the vertical social structure of a prehistoric society to a remarkable point. Exemplary in its methodological rigour, it also elucidates the limitations of such an approach.

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Jennifer M. Bagley, Zwischen Kommunikation und Distinktion. Ansätze zur Rekonstruktion frühlatènezeitlicher Bildpraxis. Vorgeschichtliche Forschungen volume 25. Verlag Marie Leidorf, Rahden / Westf. 2014. € 69.80. ISBN 978-3-89646-507-8. 724 pages with 185 figures, 45 tables and 212 plates.

On the outside, the brick of a book is bound in dark blue and embossed with golden letters. Inside the reader await velvety white pages and an abundance of high quality illustrations, maps, graphs and tables. Bagley's dissertation was chosen to become the 25<sup>th</sup> volume of the oldest and most distinguished German archaeological monograph series "Vorgeschichtliche Forschungen". Started in 1924, the series had recently thought to have come to an end when there were no new volumes published for about 10 years (p. 9). Designed as if from good old days, the book today oscillates between retro-style icon and reanimated dinosaur. The price the volume is offered for seems a bargain as it probably won't even cover the raw material it is made of. As nobody will want to carry around over 3 kg, the book's prestigious appearance lays claim to be offered one of the rare places on the shelf of standard volumes. Indeed, between its covers it holds a dragon's treasure of European prehistory: a catalogue of more than 1 100 Early La Tène metal objects with figurative decoration from about 750 sites all over Europe. In the author's own words, her aim with these precious objects is the attempt "to evaluate the significance of figural art in prehistoric times" (p. 283). Full of expectation we open the book: will it live up to its ambitions?