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Korinjski hrib
in poznoantične vojaške utrdbe v Iliriku

Korinjski hrib
and late antique military forts in Illyricum

Slavko Ciglenečki
Zvezdana Modrijan
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Slavko Ciglenečki
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Korinjski hrib in poznoantične vojaške utrdbe v Iliriku

Sodelavci: Peter KOS, Mateja KOVAČ, Borut TOŠKAN,
Lucija GRAHEK, Darja GROSMAN, Julijana VISOČNIK

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VSEBINA

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7. ANIMAL REMAINS

Borut TOŠKAN

Najdišče Korinjski hrib (728 m nm. v.) leži severno od vasi Mali in Veliki Korinj v zahodnem delu Suhe krajine, 30 km jugovzhodno od Ljubljane. Najzgodnejša poselitev na tem mestu sega v čas mlajše bakrene dobe, s številnimi najdbami pa sta izpričani tudi bronastodobna in poznolatenska poselitvena faza (glej pogl. 13). Od mlajših obdobij je skromno človekovo prisotnost mogoče dokazati za čas druge polovice 3. stoletja, nemara celo že nekoliko prej, tj. v 1. in 2. stoletju. Močneje je zastopana faza druge polovice 4. in prvih desetletij 5. stoletja, kar bi utegnilo biti povezano z začetkom stalne uporabe utrdbe, namenjene kontroli ceste Siscija–Akvileja na prostoru zahodne Dolenjske (Ciglenečki 1985). Najintenzivnejši sledovi poselitve, med katerimi je najti tudi edine zanesljive ostanke arhitekture, datirajo v pozno antiko (okvirno od konca 5. do 2. pol. 6. st.). Tedaj je bilo na robu 180 x 100 m velikega območja na vrhu hriba postavljenih 5 zidanih obrambnih stolpov, v njegovem osrednjem delu pa skromna zgodnjekrščanska cerkev (*sl. 7.1*). Prva faza cerkvene stavbe naj bi bila, skupaj s posameznimi bivalnimi objekti iz slabo obstojnih matrialov, zgrajena še pred koncem 5. stoletja, medtem ko kaže postavitev stolpov datirati v čas po letu 536, tj. po Justinjanovi rekonkvisti (glej pogl. 15). Na podlagi strateške lege in skoraj le na obrambo omejene zidane arhitekture je bila vloga poznoantičnega Korinjskega hriba prepoznana kot točka, ki ni imela zgolj pribežniško-naselbinskega značaja, pač pa je z naselitvijo manjše vojaške posadke z družinami varovala enega pomembnejših prehodov z vzhoda proti Italiji (Ciglenečki 1999, 306).

MATERIAL IN METODE

Podroben opis najdišča in metodologije terenskega raziskovanja iz let 1982 in 1983 podajata Modrijanova in Ciglenečki (glej pogl. 2), zato so na tem mestu povzeti le nekateri najpomembnejši podatki. Izkopavanja so potekala na klasičen (nestratigrafski) način z odstranjevanjem režnjev arbitrarno določene debeline. Najdbe, vključno z živalskimi kostmi, so bile pri tem pobirane

The site of Korinjski hrib (728m asl) is situated north of Mali Korinj and Veliki Korinj villages in the western part of Suha krajina, 30km south-east from Ljubljana. The earliest population in this spot reaches back to the times of the Late Copper Age; Bronze Age and Late La Tène settlement phases are also attested with numerous finds (see Chapter 13). Among later periods modest human presence can be proven for the time of the second half of the 3rd century, possibly even a little earlier, i.e. in the 1st and 2nd centuries. Slightly better represented is the occupation phase of the second half of the 4th and the first decades of the 5th centuries, which could be related to the beginning of the permanent use of the fort intended to control the Siscia–Aquileia road in the area of the western Dolenjska region (Ciglenečki 1985). The most intensive traces of settlement, which also include the only reliable remains of architecture, are dated to the late antiquity (approximately from the end of the 5th to the 2nd half of the 6th century). At that time, 5 stone defence towers were built at the edge of the 180 x 100m large area at the top of the hill, while a modest Early Christian church stood in its central part (*Fig. 7.1*). Together with individual dwelling structures made of poorly resistant materials, the first phase of the church building was supposedly constructed prior to the end of the 5th century, while the construction of the towers can be dated to the time after 536, i.e. after Justinian's reconquista (see Chapter 15). Based on its strategic position and stone architecture almost exclusively limited to defence, the role of late antique Korinjski hrib was recognised as a spot which was not of only refuge-settlement character but with the arrival of a smaller military crew with their families protected one of the more important passes from the east towards Italy (Ciglenečki 1999, 293).

MATERIAL AND METHODS

A detailed description of the site and methodology of field research from 1982 and 1983 is presented in Modrijan, Ciglenečki (see Chapter 2), therefore, only a few most important data are summarised here. Excava-

zgolj ročno, saj se sejanje ali spiranje vzorcev sedimenta ni izvajalo. Stolpi in cerkev so bili v globino raziskani do nivoja hodne površine oziroma – kjer ta ni bila ohranjena – do geološke osnove, okolica objektov pa le v širini pribl. 1 m okrog zidov. Ob tem je bilo znotraj in zunaj naselja izkopanih še več sond, ki pa niso dala omembe vredne količine živalskih kosti in zob.

Zaradi zgolj ročnega pobiranja favnističnih ostankov je delež manjših najdb v analiziranem gradivu podcenjen. To je mogoče med drugim ugotoviti iz zgolj 35-odstotnega deleža taksonomsko neopredeljenih ostankov, prav tako pa tudi iz skromne zastopanosti drobnih, čeprav sicer na tafonomske dejavnike razmeroma odpornih skeletnih elementov (npr. zobje, zapestne in manjše nartne kosti). Taksonomska analiza zbranega arheozoološkega gradiva je zajela ostanke vseh skeletnih elementov z izjemo reber. Pri poskusu razlikovanja med ostanki ovce in koze so bile upoštevane v stroki splošno uveljavljene morfološke specifike posameznih skeletnih elementov (Boessneck, Müller, Teichert 1964; Zeder, Pilaar 2010), medtem ko je bil delež domačega in divjega prašiča ocenjen na podlagi metričnih podatkov (Payne, Bull 1988). Ti so bili zbrani na podlagi smernic, ki jih je objavila von den Driesch (1976).

Kvantitativne primerjave med taksoni temeljijo na številu določenih primerkov (NISP; Grayson, 1984). Pri tem so bili odlomki, ki nedvoumno pripadajo isti kosti, upoštevani kot le en primerek (tj. NISP = 1). V okviru analize zastopanosti posameznih skeletnih elementov so bili ti na podlagi ocen o kakovosti in količini pripadajočega mesa razvrščeni v tri kategorije (prim. Uerpmann, 1973): kategorija A (vključuje ostanke nosačev, okretačev ter drugih vratnih, prsnih in križnih vretenc, lopatic, nadlahtnic, medenic in stegnenic), kategorija B (obsega ostanke lobanj, spodnjih čeljustnic, koželjnic, golenic in piščali) ter kategorija C (vključuje ostanke zgornjih čeljustnic, zob, dlančnic, stopalnic, zapestnih kosti, skočnic, petnic in ostalih nartnih kosti ter prstnic).

Favnistično gradivo s Korinjskega hriba hrani Narodni muzej Slovenije.

TAKSONOMIJA

Analizirano gradivo vključuje 581 kosti in zob. Prevladujejo najdbe sesalcev, saj so od ostalih taksonomskih skupin s pičlimi 14 primerki zastopani zgolj še ptiči. Do ravni rodu[1] je bilo sicer mogoče opredeliti 377 kosti in zob, ki so pripadali najmanj 15 različnim vrstam (*tab. 7.1*). Pretežni del najdb je poznoantične starosti, petina pa jih izvira iz plasti s premešanim prazgodovinskim in poznoantičnim gradivom. Kar 146 zbranih živalskih ostankov ni mogoče ožje kronološko umestiti.

[1] V primeru drobnice je bila taksonomska opredelitev praviloma mogoča le do nivoja poddružine (tj. Caprinae).

tions were done in a classical (non-stratigraphic) manner with the removal of horizontal spits of arbitrarily determined thickness. Finds, including animal bones, were collected solely manually since sieving or wet-sieving of sediment samples was not performed. The towers and the church were researched in depth to the level of the walking surface or—where it was not preserved—to the geological base, and the surroundings of the structures to only the width of about 1m around the walls. Outside and inside the settlement several additional trial trenches were dug out; however, they did not yield an amount of animal bones and teeth worth mentioning.

Due to solely manual collection of faunal remains the share of smaller finds in the analysed material is underrated. This can also be discovered from the only 35 per cent share of taxonomically unidentified remains, as well as from the modest representation of small, even though relatively robust skeletal elements (e.g. teeth, carpal and smaller tarsal bones). Remains of all skeletal elements were submitted to taxonomic analysis with the exception of ribs. In the attempt to distinguish between the remains of sheep and goat, the generally established species-specific morphological features of individual skeletal elements were considered (Boessneck, Müller, Teichert 1964; Zeder, Pilaar 2010), while the share of domestic pig and wild boar were estimated based on metric data (Payne, Bull 1988). The latter were collected on the basis of guidelines published by von den Driesch (1976).

Quantitative comparisons between taxa are based on the number of identified specimens (NISP; Grayson, 1984). Fragments which undoubtedly belong to the same bone were considered as one specimen (i.e. NISP = 1). The analysis of skeletal elements representation data was performed by assigning them to three categories based on estimates about the quality and quantity of attached meat (cf. Uerpmann, 1973): category A (includes remains of atlas, axis and other cervical, thoracic, and sacral vertebrae, scapulae, humeri, pelvises, and femurs), category B (includes remains of skulls, lower jawbones, radii, and tibiae), and category C (includes remains of upper jawbones, teeth, metacarpals, metatarsals, carpals, tarsals, and phalanges).

Faunal material from Korinjski hrib is kept by National Museum of Slovenia (Narodni muzej Slovenije).

TAXONOMY

The analysed material includes 581 bones and teeth. Remains of mammals are prevalent with other taxonomic groups being represented by a scant 14 finds ascribed to birds. The total of 377 bone and teeth fragments could have been identified at least to the level of a genus;[1] they belonged to a minimum of 15 different species (*Tab. 7.1*).

[1] In the case of sheep and goats the taxonomic classification was possible only to the level of subfamily (i.e. Caprinae).

Takson Taxon	Vzorec Sample				
	1		2		3
	N	%	N	%	N
Bos taurus	43	37	87	35	50
Caprinae	21	18	64	26	27
Sus sp.	34	30	68	27	24
Equus caballus	-	-	3	1	-
Canis familiaris	-	-	3	1	-
Cervus elaphus	14	12	20	8	5
Capreolus capreolus	-	-	3	1	1
Meles meles	1	1	1	<1	-
Martes sp.	-	-	-	-	1
Ursus arctos	1	1	-	-	-
Bos / Cervus	1	1	2	1	1
Glis glis	-	-	-	-	1
Gallus domesticus	2		8		4
Aves (drugo / rest)	-		2		-
NISP	117		261		114
Indetermintaus	2		172		32
Skupaj / Total	119		433		146

Tab. 7.1: Zastopanost živalskih taksonov. Pri vzorcih 1 in 2 je podan tudi delež posameznih sesalskih (!) taksonov. Opredelitev vzorcev: 1 – prazgodovina/pozna antika; 2 – pozna antika; 3 – neznano.
* Slovenski prevodi latinskih imen: *Bos taurus* – domače govedo, Caprinae – drobnica (tj. ovca in koza), *Sus* sp. – domači in divji prašič, *Equus caballus* – konj, *Canis familiaris* – pes, *Cervus elaphus* – jelen, *Capreolus capreolus* – srna, *Meles meles* – jazbec, *Martes* sp. – kuna belica ali zlatica, *Ursus arctos* – rjavi medved, *Glis glis* – navadni polh, *Gallus domesticus* – kokoš, Aves – ptiči.
Tab. 7.1: Representation of animal taxa. With samples 1 and 2, the share of individual mammal (!) taxa is also given. Definition of samples: 1 – prehistory/late antiquity; 2 – late antiquity; 3 – unknown.
* English translations of Latin names: *Bos taurus* – domestic cattle, Caprinae – caprines (i.e. sheep and goat), *Sus* sp. – domestic pig and wild boar, *Equus caballus* – horse, *Canis familiaris* – dog, *Cervus elaphus* – red deer, *Capreolus capreolus* – roe deer, *Meles meles* – badger, *Martes* sp. – beech or pine marten, *Ursus arctos* – brown bear, *Glis glis* – dormouse, *Gallus domesticus* – chicken, Aves – birds.

V nadaljevanju bo pozornost namenjena predvsem predstavitvi poznoantičnih najdb.

Taksonomska pestrost poznoantičnega gradiva je velika. Skupno število dokumentiranih vrst (N = 12) je namreč primerljivo s tistim, ki je bilo ugotovljeno ob analizi nekajkrat bogatejših zbirov živalskih ostankov iz sicer okvirno sočasnih regionalnih središč Tonovcov grad nad Kobaridom (okvirno 100 km proti SZ; Toškan, Dirjec 2011) in Ajdovski gradec nad Vranjem (50 km proti SV; Bartosiewicz, Choyke 1985). K navedeni ugotovitvi seveda ključno prispeva prisotnost kar petih lovnih vrst, kar bi bilo načeloma mogoče navezati na domnevno pretežno vojaški – in ne pribežniško-naselbinski – značaj tedanje postojanke (prim. Bartosiewicz 1990–1991). Vendar pa jelen, srna, divji prašič, jazbec in taksonomsko ožje neopredeljena vrsta ptiča skupaj prispevajo zgolj desetino vseh taksonomsko opredeljenih najdb, neupoštevaje potencialno v naravi pobranih rogovij jelenov in srnjakov pa še nekoliko manj (tj. 7 %). Slednje seveda pomeni, da lov ni bil omembe vreden vir mesa in maščob in da bi utegnil biti razmeroma visok delež lovnih vrst v analiziranem gradivu pravzaprav naključen.

Kot je razvidno iz *tabele 7.1* so ob že omenjenemu skromnemu deležu divjadi v analiziranem zbiru najdb pičlo zastopane tudi nekatere vrste domačih živali. Konjskih in pasjih kosti je bilo, denimo, v poznoantičnih kontekstih prepoznanih vsega skupaj le šest, kokoš pa je zastopana z zgolj osmimi najdbami. To posledično pomeni, da ostanki goveda, drobnice in domačega prašiča skupaj predstavljajo več kot štiri petine vseh

The majority of finds is of late antique age, while a fifth of the analysed specimens originates from the layer with mixed prehistoric and late antique material. The remaining 146 finds could not have been reliably dated. Hereon, the most attention will be devoted to the presentation of late antique finds.

Taxonomic diversity of late antique material is fairly pronounced. The total number of documented species (N = 12) is comparable to the one determined in the analysis of several times larger assemblages from approximately contemporary regional centres Tonovcov grad above Kobarid (about 100km NW; Toškan, Dirjec 2011) and Ajdovski gradec above Vranje (50km NE; Bartosiewicz, Choyke 1985). The stated finding is in great part related to the presence of no less than five species of wild animals, which could be related to the supposedly prevalently military—and not refuge-settlement—character of the post (cf. Bartosiewicz 1990–1991). Nevertheless, red deer, roe deer, wild boar, badger, and a taxonomically unidentified species of bird together contribute only one tenth of all taxonomically allocated finds. This value drops to 7% if we do not consider roe and red deer antlers, which could have been gathered by collecting shed specimens. It is thus evident that hunting wasn't a quantitatively relevant source of meat and that the relatively high share of wild species in the analysed material could actually be coincidental.

As can be discerned from *Table 7.1*, in addition to the modest share of game, some species of domestic animals are also scarcely represented. In the late antique contexts, for example, there were only six horse and dog bones in total, while chicken is represented with only eight finds.

taksonomsko opredeljenih živalskih ostankov poznoantične starosti. V tem smislu se arheozoološko gradivo s Korinjskega hriba sklada z veliko večino drugih okvirno sočasnih zbirov živalskih najdb z jugovzhodnoalpskega prostora (Bartosiewicz, Choyke 1985; Svoljšak 1985, 226–227; Turk 2000; Toškan, Dirjec 2011; Dirjec et al. 2011, tab. 1; lastni neobjavljeni podatki). Kar je nekoliko manj običajno, sploh v primerjavi s peščico arheozoološko obdelanih najdišč[2] različnih časovnih obdobij v radiju do 20 km od tukaj obravnavane postojanke, je praktično identičen delež zastopanosti ostankov prašiča in drobnice. Naravne danosti proučevanega območja so namreč bolj naklonjene reji drobnice kot prosti paši prašičev, katerih najdbe se v večjem številu tudi zaradi tega pojavljajo predvsem na najdiščih iz bolj vodnatih jugovzhodnih in severnovzhodnih predelov današnje Slovenije (glej npr. Toškan, Dirjec 2010, sl. 6). Med najdbami drobnice kaže sicer domnevati nekoliko boljšo zastopanost ovce, medtem ko prašičji ostanki skoraj brez izjeme pripadajo domačemu prašiču (*tab. 7.2*).

Tab. 7.2: Število do vrste opredeljenih ostankov drobnice in prašiča.
Tab. 7.2: The number of caprine and pig remains defined to the level of species in the material of late antique age.

Takson Taxon	N_{Σ}	Opredelitev do vrste Species identification	
		Zanesljiva Reliable	Verjetna Probable
Sus domesticus	68	10	3
Sus scrofa		1	1
Ovis aries	64	12	-
Capra hircus		4	-

Do neke mere neobičajna je tudi ugotovitev, da je najbolje zastopan takson govedo. Podatki z drugih arheozoološko obdelanih poznoantičnih najdišč v širši regiji namreč pričajo o tem, da se je s tedanjim procesom zamiranja naselbin v nižinskem svetu in sočasnim nastajanjem številnih utrjenih višinskih postojank obseg govedoreje znatno skrčil, porasla pa je manj zahtevna reja drobnice, prašičev in perutnine (Toškan 2013 in tam navedena literatura). Vzporedno s tem je prišlo do upada povprečne velikosti domačih živali, še najočitneje prav goveda (Boschin, Toškan 2012). Časovnica teh sprememb se je sicer med posameznimi območji znotraj cesarstva v tem delu Evrope do neke mere razlikovala, vendar predvsem na način, da je proces sprva zajel periferijo,

[2] Upoštevani so bili podatki za naslednja najdišča: Cvinger nad Koriti (starejša železna doba; NISP = 206; Bartosiewicz 1996), Kunkel pod Vrhtrebnjem (starejša železna doba; NISP = 282; Bartosiewicz 1996); Stična (starejša in mlajša železna doba; NISP = 4488; Bökönyi 1994), Ivančna Gorica (pozna antika in srednji vek; NISP = 204; Toškan, Dirjec 2013).

As a consequence this means that remains of cattle, sheep, goat, and domestic pig together represent more than four fifths of all taxonomically identified animal remains of late antique age. In this respect, the archaeozoological material from Korinjski hrib is analogous with the great majority of other approximately contemporary assemblages of animal finds from the area of the Southeastern Alps (Bartosiewicz, Choyke 1985; Svoljšak 1985, 226–227; Turk 2000; Toškan, Dirjec 2011; Dirjec et al. 2011, Tab. 1; my own unpublished data). What is slightly less usual, especially in comparison with the handful of archaeozoologically researched sites[2] of different periods of time in the radius of up to 20km from the site discussed here, is the practically identical share of representation of pig and caprines. The environment of the researched area is, namely, more suitable for the breeding of sheep and goats than free grazing of pigs, which prefer(red) the more water-rich south-eastern and north-eastern parts of present-day Slovenia (see e.g. Toškan, Dirjec 2010, Fig. 6). It seems that among caprine finds a slightly better representation of sheep should be assumed, while pig remains almost exclusively belong to domestic pig (*Tab. 7.2*).

To some extent unusual is also the fact that the best represented taxon is cattle. Data from other archaeozoologically researched late antique sites in the wider region testify to the fact that the then process of towns and other settlements in the lowlands perishing and the simultaneous rise of a multitude of fortified hill-top settlements significantly decreased the extent of cattle husbandry, while the less demanding breeding of sheep, goat, pig, and poultry increased (Toškan 2013 and works cited there). Parallel to this there was a decrease in the average size of domestic animals, which was most significant in cattle (Boschin, Toškan 2012). The timeline of these changes did indeed differ to some extent between individual areas of the Empire in this part of Europe, however, primarily in the way that the process at first took hold on the periphery, and then slowly spread towards Italy (Toškan, Dirjec 2011, 333–363). A fairly high share of cattle in the late antique material from Korinjski hrib would in this respect present a notable exception since a significant decrease in the breeding of this important domesticate supposedly occurred prior to the end of the 5th century even in the more western-located areas of Vipavska dolina and Posočje (see e.g. Toškan 2017, 23).

According to the alternative explanation, the slightly higher share of cattle bones and teeth could be attributed primarily to the fact that finds were collected manually. Such an approach to sampling must have led to the less efficient collecting of bones and teeth of smaller animals

[2] Data for the following sites were taken into account: Cvinger above Korita (Early Iron Age; NISP = 206; Bartosiewicz 1996), Kunkel under Vrhtrebnje (Early Iron Age; NISP = 282; Bartosiewicz 1996); Stična (Early and Late Iron Ages; NISP = 4488; Bökönyi 1994), Ivančna Gorica (late antiquity and Middle Ages; NISP = 204; Toškan, Dirjec 2013).

Tab. 7.3: Metrični podatki za goveje ostanke poznoantične starosti. Podana je tudi opisna statistika za iste dimezije pri okvirno sočasnem gradivu z najdišča Tonovcov grad nad Kobaridom (Toškan, Dirjec 2011, pril. 8.1, tab. A). Dimenzije in okrajšave zanje so povzete po von den Driesch (1976). Obrazložitev drugih okrajšav: PA 1 – prva poznoantična faza (2. pol. 4. in zač. 5. st.); PA 2 – druga poznoantična faza (konec 5. do zač. 7. st.); Me – mediana; N – število razpoložljivih izmerkov; min.–max. – razpon vrednosti.
Tab. 7.3: Metric data for cattle remains of late antique age. Also presented are the descriptive statistics for the same dimensions with the approximately contemporary material from the site of Tonovcov grad above Kobarid (Toškan, Dirjec 2011, App. 8.1, Tab. A). Dimensions and their abbreviations are adopted after von den Driesch (1976). Key to other abbreviations: PA 1 – the first late antique phase (2nd half of the 4th and the beginning of the 5th century); PA 2 – the second late antique phase (end of the 5th to the beginning of the 7th century); Me – median; N – number of measurements available; min.–max. – range.

Sk. element	Dimenzija Dimension	Izmerki (v mm) Measurements (in mm)			Primerjalni podatki Comparative data	
					PA 1 / LA 1	PA 2 / LA 2
					Me (N) min.–max.	Me (N) min.–max.
Radius	SD	46,5			38,0 (3) 35,5–38,0	37,25 (2) 31,5–43,0
Ulna	BPC	33,5	-		47,0 (1)	39,0 (1)
	SDO	-	49,0		50,5 (1)	--
	DPA	-	58,0		67,0 (1)	63,0 (1)
Metacarpus	Bp	54,5	-		49,0 (5) 36,0–57,0	49,0 (5) 45,0–60,0
	Dp	33,0	-		32,7 (4) 28,5–35,5	34,0 (6) 28,0–42,5
	Bd	-	51,0		63,5 (1)	62,25 (2) 61,0–63,5
Femur	DC	44,0			44,5 (7) 39,0–46,5	39,0 (5) 38,0–47,0
Tibia	SD	38,5	-		35,0 (2) 31,5–38,5	39,5 (1)
	Bd	-	65,5		57,75 (8) 50,5–65,0	56,0 (5) 55,0–57,0
	Dd	-	50,5		43,0 (7) 37,5–48,0	41,5 (3) 40,0–42,0
Astragalus	GLl	61,0	-	-	62,5 (11) 58,0–68,0	59,75 (4) 58,0–68,0
	GLm	55,0	57,0	-	57,25 (10) 49,0–63,0	56,0 (4) 32,0–64,0
	Dm	-	33,5	-	35,0 (7) 32,0–36,0	33,0 (3) 32,0–35,0
	Bd	37,5	-	40,5	38,5 (10) 31,0–43,0	40,25 (6) 35,5–44,5
Calcaneus	GB	36,0	-		40,25 (2) 40,0–40,5	42,5 (1)
	GL	-	139,0		134,0 (2) 131,0–137,0	130,0 (1)
Metatarsus	Bp	47,5	-	-	46,0 (9) 43,5–50,0	45,0 (5) 41,5–50,5
	Dp	42,0	-	-	45,5 (5) 39,5–46,5	42,0 (4) 40,5–48,0
	DD	-	26,5	-	24,25 (8) 21,5–26,0	--
	Bd	-	59,5	-	51,5 (5) 49,0–54,5	54,5 (1)
	Dd	-	32,5	31,5	30,0 (6) 26,5–31,0	24,0 (1)
Phalanx 1	GL	61,0			55,5 (6) 51,5–58,0	56,0 (10) 53,0–59,5
Phalanx 2	GL	42,0	35,0	38,0	39,0 (11) 33,0–44,0	39,0 (14) 26,0–40,0

nato pa se je postopoma širil proti Italiji (Toškan, Dirjec 2011, 333–363). Razmeroma visok delež goveda v gradivu poznoantične starosti s Korinjskega hriba bi v tem smislu predstavljal svojevrstno izjemo, saj naj bi celó v zahodneje ležečih Vipavski dolini in Posočju do znatnega upada obsega reje tega pomembnega domestikata prišlo še pred koncem 5. stoletja (glej npr. Toškan 2017, 23).

Po alternativni razlagi bi bilo nekoliko višji delež govejih kosti in zob mogoče pripisati predvsem dejstvu, da so bile najdbe pobirane ročno. Takšen pristop k vzorčenju je namreč nedvomno privedel do manj učinkovitega zajemanja kosti in zob manjših živali (prim. Toškan 2015). Slednje bržčas posredno potrjujejo zbrani metrični podatki. Ti kažejo na večinsko prisotnost ostankov razmeroma nizkoraslih, za lokalna poznoantična najdišča značilnih form goveda, in ne velikih rimskih živali, ki so v tem prostoru prevladovala pred že omenjenimi poznoantičnimi korenitimi spremembami v poselitveni sliki (*tab. 7.3*). Ocena starostne strukture ponuja indice o izraziti prevladi ostankov odraslih primerkov, kar je za obravnavano obdobje pravzaprav pričakovano (Toškan 2013, 47–48).

(cf. Toškan 2015). The latter is probably indirectly confirmed by gathered metric data which indicate the predominance of relatively small, for local late antique sites typical forms of cattle, and not large animals of improved Roman breeds, which prevailed in this area prior to the above-mentioned late antique thorough changes in settlement structure (*Tab. 7.3*). The mortality profile offers indices about the distinct prevalence of remains of adult specimens which is actually quite expected for the period discussed (Toškan 2013, 47–48).

Tab. 7.4: Število kosti goveda z (ne)zraščenima epi- in diafizo po starostnih skupinah. Posamezno skupino sestavljajo skeletni elementi, ki popolnoma osificirajo pri isti ontogenetski starosti (tj. pred skotitvijo, v prvem, drugem, tretjem, četrtem ali po četrtem letu življenja). Podatke o časovnem poteku zraščanja epi- in diafiz podaja Silver (1969).
Tab. 7.4: The number of cattle bones with (un)fused epi- and diaphysis according to age groups. An individual group is composed of skeletal elements that completely ossify at the same ontogenetic age (i.e. prior to whelping, in the first, second, third, fourth, or after the fourth year of life). Data about the fusing phases of epi- and diaphysis is presented by Silver (1969).

Starost (v letih) Age (in years)	Epifiza / Epiphysis	
	Nezraščena Unfused	Zraščena Fused
<0	-	11
0–1	-	-
1–2	-	15
2–3	2	-
3–4	2	8
4–	-	-
Σ	4	34

RAZPRŠENOST ŽIVALSKIH OSTANKOV V PROSTORU

Podatki o zastopanosti posameznih skeletnih elementov v gradivu poznoantične starosti s Korinjskega hriba kažejo, da so pri gospodarsko najpomembnejših vrstah prisotni ostanki vseh delov telesa (*tab. 7.5*). Pri tem bi bilo nemara mogoče nekoliko skromnejši delež odlomkov lobanje s čeljustnicama, izoliranih zob, zapestnih in manjših nartnih kosti ter prstnic pripisati že omenjenim napakam zaradi načina pobiranja najdb. Na posameznih kosteh so prisotne sledi vrezov (govedo: N = 12, drobnica: N = 2; prašič: N = 2); nekateri primerki so obgrizeni (govedo: N = 1, prašič: N = 3) ali ožgani (govedo: N = 1; prašič: N = 1). Gre za sledi človekovega delovanja, ki se značilne za kostno gradivo s skupkov klavniških in gospodinjskih odpadkov. S tem v zvezi je nekoliko neobičajna zgolj ugotovitev, da je kar devet od

SPATIAL DISPERSION OF ANIMAL REMAINS

Skeletal elements representation data for the late antique material from Korinjski hrib indicate that remains of all body parts are present for the economically most important species (*Tab. 7.5*). A somewhat more modest share of fragments of skull with jawbones, isolated teeth, carpals, and smaller tarsals as well as phalanxes could be attributed to above-mentioned errors due to the manner of find gathering. Cut-marks are present on individual bones (cattle: N = 12, caprines: N = 2; pig: N = 2); some bones are gnawed (cattle: N = 1, pig: N = 3) or burnt (cattle: N = 1; pig: N = 1). These are traces of human activities which are characteristic for secondary and tertiary (i.e. household) butchery waste. Connected to this the only unusual finding is the one that no fewer than nine from the total of twelve discovered cut-marks on cattle remains

Tab. 7.5: Zastopanost skeletnih elementov posameznih živalskih vrst v gradivu poznoantične starosti s Korinjskega hriba (izkopavanja iz let 1982 in 1983).
Tab. 7.5: Representation of skeletal elements of individual animal species in the late antique material from Korinjski hrib (excavations from 1982 and 1983).

Sk. element	*B. taurus*	Caprinae	*Sus* sp.	*E. caballus*	*C. familiaris*	*C. elaphus*	*C. capreolus*	*M. meles*
Cornua						6	1	
Proc. cornualis	2	1				1		
Cranium	1	2	2					
Maxilla			7					
Mandibula		8	7		1	1		
Dentes	8	14	12			3		
Vertebrae	6	5	1					
Pelvis	3	2	2					
Scapula	3	1	7			1		
Humerus	3	5	6	1		1	1	
Radius	3	8	2			2	1	
Ulna	2		1					
Carpalia	1							
Metacarpalia	7	4	4			1		1
Femur	4	5	5	2	1			
Patella	1		2					
Tibia	2	1	1			1		
Astragalus	7	2	2					
Calcaneus	6	1	1			2		
Tarsalia (drugi / rest)	2							
Metatarsalia	7	4	1		1			
Phalanges 1	7	1	2			1		
Phalanges 2	6		1			1		
Phalanges 3	6		1					

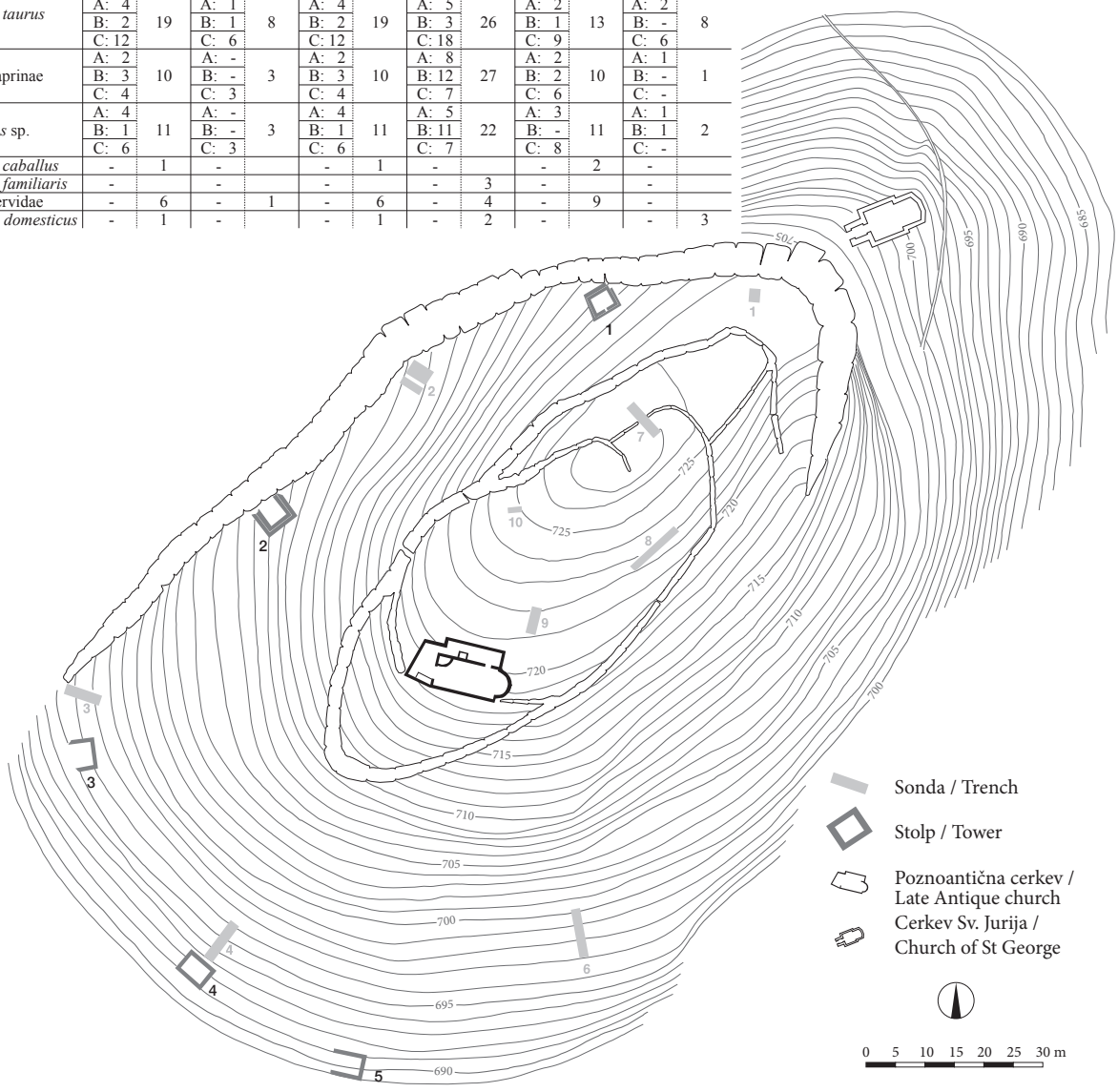
skupno dvanajstih odkritih vrezov na govejih ostankih najti na kosteh spodnjega dela zadnjih nog, tj. na petnici (N = 1), skočnicah (N = 4), stopalnicah (N = 2, obakrat na distalnem delu kosti) in prstnicah (N = 2). Gre sicer za sledi, ki so domnevno nastale ob grobem kosanju kadavra in ob njegovem odiranju (Binford 1981, sl. 4.27).

Na podlagi zgornje teze, po kateri kaže pretežni del zbranih živalskih ostankov razumeti kot ostanek prehrane, so v nadaljevanju predstavljeni rezultati analize razpršenost taksonomsko opredeljenih živalskih ostankov v prostoru. Prisotnost eventualnih razlik med posameznimi objekti bi namreč načeloma lahko ponujala vpogled v socialno razslojenost in/ali funkcionalno raznolikost tam živeče skupnosti (prim. Bartosiewicz 1999, 315–316; Toškan, Dirjec 2011, 325–330). Ker so v razpoložljivi terenski dokumentaciji podatki o natančni najdiščni legi živalskih ostankov skopi, je bila analiza razpršenosti opravljena na ravni primerjave

can be found on bones of the lower part of hind legs, i.e. on the calcaneus (N = 1), astragali (N = 4), metatarsals (N = 2, both on the distal part of the bone), and phalanxes (N = 2). These are traces that supposedly occurred during the primary butchering and skinning of the carcass (Binford 1981, Fig. 4.27).

Based on the thesis above, according to which the greatest part of the gathered animal remains should be understood as food remains, hereon results of the analysis of the spatial dispersion of taxonomically indentified animal remains are presented. The presence of possible differences between individual structures could in principle offer an insight into the social stratification and/or functional diversity of the community living there (cf. Bartosiewicz 1999, 315–316; Toškan, Dirjec 2011, 325–330). Since the available field documentation offers scarce data about the precise findspot of animal remains, the dispersion analysis was performed on the level of

Takson Taxon	Cerkev Church		Stolp 1 Tower 1		Stolp 2 Tower 2		Stolp 3 Tower 3		Stolp 4 Tower 4		Stolp 5 Tower 5	
	Kategorija Category	∑ NISP	Kategorija Category	∑ NISP	Kategorija Category	∑ NISP	Kategorija Category	∑ NISP	Kategorija Category	∑ NISP	Kategorija Category	∑ NISP
B. taurus	A: 4 B: 2 C: 12	19	A: 1 B: 1 C: 6	8	A: 4 B: 2 C: 12	19	A: 5 B: 3 C: 18	26	A: 2 B: 1 C: 9	13	A: 2 B: - C: 6	8
Caprinae	A: 2 B: 3 C: 4	10	A: - B: - C: 3	3	A: 2 B: 3 C: 4	10	A: 8 B: 12 C: 7	27	A: 2 B: 2 C: 6	10	A: 1 B: - C: -	1
Sus sp.	A: 4 B: 1 C: 6	11	A: - B: - C: 3	3	A: 4 B: 1 C: 6	11	A: 5 B: 11 C: 7	22	A: 3 B: - C: 8	11	A: 1 B: 1 C: -	2
E. caballus	-	1	-		-	1	-		-	2	-	
C. familiaris	-		-		-		-	3	-		-	
Cervidae	-	6	-	1	-	6	-	4	-	9	-	
G. domesticus	-	1	-		-	1	-	2	-		-	3



Sl 7.1: Zastopanost posameznih živalskih taksonov znotraj skupkov živalskih ostankov z območja vsakega od petih stolpov in cerkvene stavbe. V primeru goveda, drobnice in prašiča so podani tudi podatki o številu skeletnih elementov iz najbolj (A), srednje (B) in najmanj (C) mesnatih delov telesa.
Fig. 7.1: Representation of individual animal taxa within clusters of animal remains from the area of each of the five towers and the church. For cattle, sheep/goat, and pig data about the number of skeletal elements from the most (A), medium (B), and least (C) meaty parts of the body are also presented.

skupkov kosti in zob z območja posameznega od petih obrambnih stolpov in cerkvene stavbe (*sl. 7.1*). Pri tem so rezultati pokazali, da v smislu deleža zastopanosti posameznih taksonov, predvsem pa pogostnosti najdb iz (naj)bolj mesnatih delov telesa, nekoliko odstopa le skupek kosti z območja cerkve. Skoraj edino tu namreč najbolje zastopana živalska vrsta ni govedo in zgolj tu

comparison of bone and teeth assemblages from the area of an individual from the total of five defence towers and the church (*Fig. 7.1*). The results showed that regarding the share of representation of individual taxa, but especially of skeletal elements from (the) most meaty body parts, only the assemblage from the area of the church slightly stands apart. Namely, almost only here the best represented ani-

med najdbami vseh treh najpomembenjših domestikatov prevladujejo skeletni elementi iz najbolj mesnatih delov trupa.

Pri poskusu razlage navedenih rezultatov je treba najprej poudariti, da so vzorci žal izjemno majhni (razpon vrednosti NISP: 14 – 84), kar seveda nekoliko zmanjšuje njihovo verodostojnost. Slednje zaradi zgolj ročnega pobiranja najdb najbrž še posebej velja za podatke o deležu posameznih taksonov. Nekoliko bolj uporabni se zdijo rezultati analize zastopanosti posameznih skeletnih elementov, saj med najdbami z območja cerkve pri vseh treh gospodarsko napomembnejših vrstah prevladujejo ostanki mesnatih zgornjih delov obeh parov okončin in hrbta, medtem ko tega pri gradivu iz posameznih stolpov ni bilo mogoče ugotoviti v nobenem od 15 opazovanj. Ker je bil kriterij za odvzem kostnih najb med potekom izkopavanj bržčas vseskozi enak, je obseg napake zaradi sub-optimalnega načina vzorčenja v tem primeru domnevno nekoliko skromnejši.

DIAHRONE SPREMEMBE

Na podlagi naporov, vloženih v časovno opredelitev arheozoološkega gradiva s Korinjskega hriba, je bilo mogoče razmeroma ozko datirati zgolj zbir najdb poznoantične starosti. Edini drug skupek ostankov, ki dopušča vsaj parcialno umestitev v čas, domnevno združuje prazgodovinske in poznoantične najdbe (*tab. 7.1*). Razlike med obema navedenimi podvzorcema v vrstni pestrosti in v deležu zastopanosti posameznih taksonov so zanemarljive. V obeh primerih kaže namreč največje število kosti in zob pripisati govedu, skupni delež govejih, ovčjih, kozjih in prašičjih najdb pa presega 85 odstotkov NISP. Na podlagi navedenih ugotovitev bi nemara kazalo sklepati, da med premešanimi ostanki bržčas prevladujejo tisti poznoantične starosti, kar dodatno podkrepljuje tudi dokumentirana prisotnost kokoši. Slednja se namreč na Slovenskem ni pojavila pred začetkom starejše železne dobe, ko je imela izrazito obredni pomen (Škvor Jernejčič, Toškan 2018, 258), z nekoliko večjim deležem pa je zastopana šele v rimskem času.

SKLEP

Analiza živalskih ostankov poznoantične starosti s Korinjskega hriba ni ponudila novih znanj o gospodarstvu tedanjih obrambnih postojank na Slovenskem, je pa potrdila nekatere že objavljene ugotovitve o prilagoditvah živinoreje na samozadosten način gospodarstva v okviru novonastalih višinskih naselbin. Indice za takšen razvoj dogodkov je, denimo, najti v znižanju povprečne velikosti tedanjega goveda, saj so bile nizkorasle živali

mal species is not cattle and only here skeletal elements from the meatiest body parts prevail among the finds of all three most important domesticates.

In the attempt to explain the stated results, it first needs to be pointed out that samples are unfortunately very small (NISP value span: 14–84), which naturally slightly lowers their credibility. Due to solely manual collection of finds, the latter is probably especially true for data about the share of individual taxa. Somewhat more useful are the results of the analysis of the representation of individual skeletal elements, since among finds from the area of the church for all three economically most important species remains of meaty upper parts of both pairs of extremities and back prevail, while it was not possible to determine the same for any of the 15 observations in the material from individual towers. Since the criterion for the collection of bone finds was probably always the same during excavations, the scope of the error due to sub-optimal manner of sampling in this case is supposedly slightly smaller.

DIACHRONICAL CHANGES

Based on the efforts invested into time classification of archaeozoological material from Korinjski hrib, only the assemblage of late antique finds could be dated relatively narrowly. The only other assemblage of remains that allows for even partial assigning of time supposedly combines prehistorical and late antique finds (*Tab. 7.1*). Differences between both stated subsamples in species diversity and the share of representation of individual taxa are negligible. In both cases the greatest number of bones and teeth should be ascribed to cattle, while the total share of bovine, caprine, and porcine finds exceeds 85 per cent of NISP. Based on the presented findings it could be concluded that among chronologically mixed remains those of late antique age probably prevail, which is additionally supported by the documented presence of chicken. Namely, the latter did not appear on Slovenian territory before the beginning of the Early Iron Age when it had distinctly ritual significance (Škvor Jernejčič, Toškan 2018, 258), and is represented with a slightly bigger share only from the Roman times.

CONCLUSION

The analysis of animal remains of late antique age from Korinjski hrib did not offer any new knowledge about the economy of defence posts in Slovenia at the time, yet it did confirm certain previously published findings about the adjustments of animal husbandry to the self-sufficient nature of the economy within the framework of newly developed hill-top settlements. Indications for such a development can, for instance, be

vzrejno manj zahtevne od velikih rimskih pasem, do neke mere pa bržčas tudi v visoki starosti teh živali ob zakolu. Jasno je namreč, da je bila tedanja po obsegu znatno okrnjena govedoreja primarno usmerjena v izkoriščanje drugotnih proizvodov, tj. predvsem moči, verjetno pa tud mleka. Za prehrano so bile posledično praviloma namenjene razmeroma stare, za delo ne več sposobne živali.

Bržčas najzanimivejša ugotovitev tukaj predstavljene študije pa se sicer navezuje na za Korinjski hrib edinstveno prevlado govejih, ovčjih, kozjih in prašičjih ostankov iz najbolj mesnatih anatomskih regij med najdbami z območja cerkve. Kot je nakazala podobna študija živalskih ostankov z območja t.i. stavbe 1 na poznoantičnem središču Tonovcov grad nad Kobaridom, se je namreč razlika v prehranskih navadah posameznih slojev tedanjih skupnosti utegnila kazati prav v različni možnost dostopanja do bolj mesnatih (≈ cenjenih) delov zaklanih živali (Toškan, Dirjec 2011, 328–333). Pri tem nemara ne gre za nakjučje, da so bili tudi znotraj skupka govejih kosti in zob s cerkvenega kompleksa Tonovcovega gradu z večinskim deležem zastopani prav skeletni elementi iz zgornjega dela obeh parov okončin (tj. lopatica, nadlahtnica, medenica, stegnenica) in hrbta (vretenca). Relativna prevlada teh najdb je bila na omenjeni mikro-lokaciji izrazitejša kot na kateri koli drugi arheološko raziskani točki znotraj navedenega najdišča. Še več. Bila je znatno izrazitejša celó od tiste, dokumentirane na območju osrednjega prostora že omenjene stavbe 1, katere stanovalci so si v skladu s svojim visokim statusom med drugim lahko privoščili hlapca (Toškan, Dirjec 2011, 325–328).

found in the decrease of the average size of the cattle of the time, because smaller animals were less demanding for breeding than the large Roman breeds, and, to some extent, probably also in the high age of these animals upon culling. It is clear that the cattle husbandry of the time was considerably limited in extent and directed towards the exploitation of secondary products, i.e. especially the strength but probably also milk. By inference, as a rule relatively old animals not suitable for work were used for food.

Probably the most interesting finding of the study presented here is connected to the prevalence of bovine, sheep, goat, and pig remains from the meatiest anatomical regions among the finds from the area of the church that are unique to Korinjski hrib. As was indicated by a similar study of animal remains from the area of the so-called Building 1 at the late antique centre of Tonovcov grad above Kobarid, the difference in dietary habits of individual classes of communities of the time could have been revealed exactly in the different possibility to access meatier (≈ esteemed) parts of culled animals (Toškan, Dirjec 2011, 328–333). It thus might not be a coincidence that within the cluster of bovine bones and teeth from the church complex at Tonovcov grad the skeletal elements of the upper part of both pairs of extremities were represented by the majority share (i.e. scapula, humerus, pelvis, femur) as well as of the back (vertebrae). The relative prevalence of these finds at the mentioned microlocation was more prominent than at any other archaeologically researched micro-area within the mentioned site. Not only that, it was also significantly more distinct even from the one documented in the area of the main room of the previously-mentioned Building 1, the inhabitants of which could, in accordance with their high status, afford a servant (Toškan, Dirjec 2011, 325–328).

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