

Rural Landscapes of Roman (northern) Liburnia: Diachronic Development of Organisation and the Economy in Extra-Urban Territories in the Light of Recent Archaeological Research

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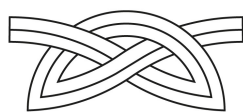
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Rural Landscapes of Roman (northern) Liburnia: Diachronic Development of Organisation and the Economy in Extra-Urban Territories in the Light of Recent Archaeological Research

The archaeology of Roman rural landscapes in the province of Dalmatia, and especially northern Liburnia, has until recently focused on single-site or single-monument analyses, allowing for only geographically patchy and chronologically limited conclusions. Considering the results of recent research in the wider Kvarner and sub-Velebit area, the paper discusses issues of Roman extra-urban territorial organisation, the formation and evolution of settlement and economies on rural estates. Using several case studies, the role of indigenous residents and immigrants in the organisation of the countryside during the early Imperial era is addressed, testifying to a diversified social structure of both landowners and the employed workforce. Later developments in rural settlement are analysed through the prism of newly emergent geopolitical factors emerging in the region from the 3rd century onward. The Christianisation of rural areas and associated novel social practices, and possibly new forms of habitation, are also covered. Finally, the final phases of use of rural sites can now be more cogently discussed thanks to new data from several, mainly insular sites.

Archaeology of the rural world of Roman Dalmatia and northern Liburnia

The archaeology of Roman rural landscapes has had a Mediterranean-wide *flo-ruit* since the establishment, in the 1950s,¹ of large field survey projects aimed at identifying sites and features within different regional settings. Topics such as settlement pattern, site typologies, land-use, productive systems, and their diachronic development have been in the focus of exploration, aided by the application of increasingly complex field data acquisition, elaboration, and analysis techniques, with growing use of remote sensing and digital tools for data manipulation.² Alongside methodological advances, a set of novel theoretical approaches to data interpretation³ accompanied the growing number of survey projects throughout

¹ TOL 2012: xii; BINTLIFF 2018; see also MARZANO 2021; KNODELL et al. 2022

² TOL 2012: xii-xiii; BINTLIFF 2018; KNODELL et al. 2022

³ E.g. MATTINGLY & WITCHER 2004; BINTLIFF 2018: 153-155.

the Mediterranean and continental Europe, allowing for discourse on economic, demographic and social issues from a comparative perspective, but also raising awareness of the method's inherent limitations.⁴ Roman extra-urban and rural territories were simultaneously approached through targeted research into single sites, their architecture, infrastructure and broader topics aimed at understanding not only the modes of organisation and occupation of these areas, but also their inhabitants, communication infrastructure and crafts,⁵ often through regional overviews and with attention to subsequent transformations.⁶ Another aspect that research into rural areas implies is their economic productivity and their incorporation into trade, commerce, and the overall economy of the broader region. Novel theoretical approaches to economic history were employed, namely New Institutional Economics (NIE) which, stated succinctly, implies a turn towards local institutions, social norms and the legal framework within which a society functions.⁷ This allows for a better understanding of property rights, productivity and relationships established within the various actors in the rural economy, as well as the role of government in managing such issues as productivity or investment.⁸

Scholarly interest in the rural world of Roman Dalmatia, on the other hand, has been patchy, and applied methods varied mostly on the basis of available data, geomorphology, and other features of the regions under scrutiny. Systematic surveys were fairly rare and mostly focused on the central Dalmatian islands⁹ and the Ravni kotari/northern Dalmatia region,¹⁰ accompanied by topographic and reconnaissance surveys¹¹ and excavations at a number of Roman rural sites,¹² again mostly concentrated in the aforementioned areas. In many cases these dealt with distinct segments of a site, e.g. productive sectors or subsequent early Christian or later churches, or specific research problems.¹³ Similarly, the interest of scholars of ancient history rarely revolved around topics related to rural areas, mostly

⁴ TOL 2012: xiii; lastly KNODELL et al. 2022.

⁵ E.g. ZANINI 2016; BOWES 2020: 1-18; ZAMBONI 2022.

⁶ E.g. BUSANA 2002; CHAVARRIA ARNAU 2007; CASTRORAO BARBA 2014; 2020.

⁷ E.g. VON REDEN & KOWALZIG 2022: 347; for such an approach to Roman rural areas see KEHOE 2007.

⁸ KEHOE 2007: 29-37.

⁹ GAFFNEY et al. 2017 with earlier bibliography; JELINČIĆ 2005; BORZIĆ 2009.

¹⁰ CHAPMAN et al. 1996.

¹¹ For a critical overview see KNODELL et al. 2022.

¹² To cite just a few: SUIĆ 1957; ZANINOVIĆ 1987; BERTRAND et al. 2022; SCHRUNK et al. 2022; for an overview see BEGOVIĆ & SCHRUNK 2001; 2002.

¹³ For e.g. BELAMARIĆ et al. 1994; BELOŠEVIĆ 1991/92; UGLEŠIĆ 2017; for an overview of processing installations see lastly in KOPAČKOVA 2020. See also BARAKA PERICA 2013: 120-121.

due to the scarcity of both historic and epigraphic sources, an exception being the mining district in Dalmatia's hinterland.¹⁴ The seminal work of M. Suić on Roman urbanism on the eastern Adriatic¹⁵ and a few other publications¹⁶ provide some insights into the urban-rural relationship and the organisation of rural areas, at least from a theoretical and historic standpoint, but archaeological data failed to follow in a more substantial manner.

Research on the economy of the region suffered from the same pitfalls, being mostly based on very scant mentions in Roman literary and geographical works,¹⁷ thus appearing detached and difficult to combine with the picture emerging from archaeological field work and material culture studies.

The Kvarner Gulf and sub-Velebit zones (an area consisting of islands, a narrow coastal belt and the mountainous eastern slopes of Učka and Velebit), a part of Liburnia in Roman times, specifically its northernmost part (Fig. 1),¹⁸ have until recently rarely been included in either rural site surveys and more systematic investigations of single rural sites, leaving a blank in our knowledge and best illustrated by the few published rural site distribution maps.¹⁹

The lack of identified sites as well as more detailed knowledge of their features and the overall organisation of rural territories hindered the inclusion of this highly urbanised area (with 13 municipal communities and other minor urban centres, e.g. Volčera)²⁰ in any discussion of rural economy, settlement, urban-rural relationships, and their economic and legal organisation. Thanks to data gathered by several recently conducted or still on-going surveys and excavation projects,²¹ our knowledge of the countryside in Roman northern Liburnia has been substantially enriched, allowing the authors of this paper to propose certain developmental vectors, consider its economy and overall organisation, and propose avenues for future research.

¹⁴ ŠKEGRO 1999; SANADER 2006; GLICKSMAN 2018.

¹⁵ SUIĆ 2003

¹⁶ SUIĆ 1996; ZANINOVIĆ 1985; BERTRAND et al. 2022.

¹⁷ SANADAR 2006; GLICKSMAN 2005.

¹⁸ For the definition of this sub-region see BASIĆ 2017: 316-318; VITELLI CASELLA 2021: 17-18; see also A. STARAC 2000: 10 and TURKOVIĆ & BASIĆ 2013: 41.

¹⁹ See BEGOVIĆ DVORŽAK & DVORŽAK SCHRUNK 2004; BOWDEN 2018, which include only so-called maritime or coastal villas, but do serve to illustrate the gap; see also JANEŠ 2015: 19; for a similar lament concerning other parts of Dalmatia see TURKOVIĆ & ZEMAN 2011: 9-10; TURKOVIĆ & MARAKOVIĆ 2012; KURILIĆ 2022, for the late antique period see ZEMAN 2014.

²⁰ A. STARAC 2000: 10-11.

²¹ These include both systematic topographic reconnaissance and extensive surveys, as well as targeted reconnaissance of single monuments and/or areas, including: the Vinodol and Crikvenica areas, the island of Krk, the Cres-Lošinj archipelago, the islands of Rab and Pag, and the sub-Velebit zone (see below for a basic bibliography).

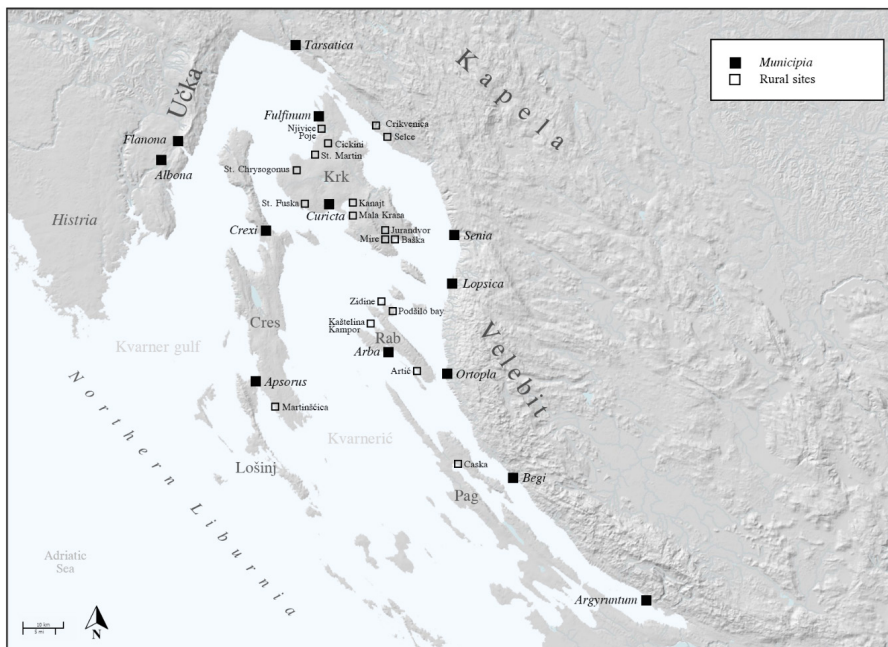


Figure 1. Map of northern Liburnia with Roman municipia and most important sites mentioned in the text (author: A. Konestra, base map: Google Maps/Snazzy Maps)

A starting point? Pre-Roman territorial organisation

The lack of territorial surveys hindered not only the recognition of Roman rural settlements, but also those dated to previous periods, so far mostly recognised as hillforts,²² with scant data on any other type of proto-historical occupation. Recently, surveys conducted in the sub-Velebit area and the application of subsequent spatial analysis²³ made it possible to more thoroughly ascertain the organisation of settlement patterns in the territories belonging to proto-historic communities, often centred around settlements that later became municipia and possessing a clear settlement hierarchy.²⁴ In the case of Roman Lopsica (Sveti Juraj) and its wider territory, Iron Age settlements and enclosures dotted the coastal hills often linked to suitable coastal berthing locations, communication with the hinterland and water sources, although each community also possessed territories in the highlands devoted to herding in the hot summer months.²⁵ Within this system, a

²² E.g. MARCHESETTI 1903; BATOVIĆ 2003; ČUČKOVIĆ 2017.

²³ GLAVAŠ 2014; GLAVAŠ & GLAVIČIĆ 2017; GLAVAŠ 2018; GLAVAŠ & GLAVIČIĆ 2019.

²⁴ GLAVAŠ 2018; GLAVAŠ & GLAVIČIĆ 2019.

²⁵ GLAVAŠ & GLAVIČIĆ 2017: 123-124; 2019: 124, 129

primary settlement could be recognised as well as an organisation that suggested social hierarchies²⁶ comparable to those identified in southern Liburnia.²⁷ Transhumant husbandry survived the dawn of antiquity, as testified by epigraphic monuments, i.e., inscriptions testifying to inter-community boundaries found at several locales on Velebit.²⁸ One example tells of an agreement on access to water between the coastal Ortoplini and the hinterland community of the Parentini, and another was found close to an actual boundary wall demarcating the territories of the Ortoplini and the Begi.²⁹

Some data on the actual settlements can be inferred for subsequent island municipia of Curicta (Krk),³⁰ and Apsorus (Osor, Cres),³¹ while a smaller, possibly “satellite” settlement has recently been reliably identified on the Kaštelina/Stolac peninsula at Lopar on the island of Rab.³² How it was linked to the hillforts and tumuli identified on the ridge south of the site,³³ and what its exact typology is cannot be inferred as yet, although short-lived, productive activities and a possible connection to maritime communication may be suggested. Its sudden demise, inferred on the basis of geophysical prospecting and still on-going trial trenching, indicates no connection to later, Roman settlement activities. Whether the hillfort system in the north-western part of the island of Rab was detached from Arba, the only settlement that became a municipium, or the latter was hierarchically the island’s main settlement – as proposed for the municipia of the nearby Velebit coast – is still difficult to ascertain. Nevertheless, minor settlements or productive units connected to agriculture or husbandry have not been securely identified for the proto-historic period, as is the case in the neighbouring region of Ravni kotari.³⁴

Roman organisation of extra-urban territories: formation of estates, settlements, infrastructure and the economy of northern Liburnia

Most scholars agree that the central settlements in pre-Roman north-east Adriatic communities usually became Roman urban centres of municipal rank after

²⁶ GLAVAŠ & GLAVIČIĆ 2019: 128

²⁷ ČAČE 1982; CHAPMAN et al. 1996: 73-80.

²⁸ GLAVAŠ 2018: 19-20; MILOTIĆ 2019: 915-916

²⁹ WILKES 1969: 258. See GLAVAŠ 2018: 19-21 for a detailed discussion; GLAVAŠ & GLAVIČIĆ 2019: 129, 132 with earlier bibliography.

³⁰ FABER 1963-65; 1986/1987; ZELIĆ 1993; LIPOVAC 1991; UGARKOVIĆ & R. STARAC 2022.

³¹ BLEČIĆ KAVUR 2015.

³² ANDROIĆ GRAČANIN et al. 2020.

³³ LIPOVAC VRKLJAN et al. 2014: 205-206 with earlier bibliography.

³⁴ CHAPMAN et al. 1996: 262-263.

the assignment of certain benefits, such as *ius Latii* or immunity.³⁵ Debate on the reasons, modes and significance of these benefits and the subsequent elevation of northern Liburnian communities to municipal rank is still ongoing,³⁶ hindering a full understanding of the organisation of estates and the influx of Italic settlers. As mentioned before, the pre-Roman territorial organization in some of these centres undoubtedly continued into the early Imperial period, and the role of the local elite within urban government³⁷ further backs the idea of at least partial continuity of social structures and organisation.

Recent territorial surveys on the island of Rab made it possible to recognise the vibrant rural settlement of the island's fields (Kamporsko, Mundanijsko, Supetarsko, and Loparsko *polje*) and coastal belt, seemingly dotted with residential-productive sites tentatively identifiable as "villae",³⁸ farms and attached or isolated productive facilities,³⁹ such as, e.g., pottery kilns. Research into other areas in the Kvarner region indicates the same dense habitation pattern in rural areas and exploitation of available resources, e.g., the island of Pag,⁴⁰ the Vinodol valley⁴¹ or Baška and its hinterland.⁴² Unfortunately, the scarcity of rural stratigraphic contexts pertaining to the 1st century CE hampers our understanding of the times and modes for the establishment of the various complexes recognised within the countryside of northern Liburnia, though several case studies indicate that interdisciplinary approaches might also shed some light on this aspect, engendering a better understanding of specific areas at the very least.

The best chronological evidence has so far been gathered at Crikvenica, where an early Roman pottery workshop was excavated yielding a large segment of the production facilities and more than 50 tons of ceramic material, including several amphorae types, ceramic building materials and pottery. Tile stamps mentioning both the type of estate – a *saltus* – and its owner – Sextus M(e/u) tillius Maximus – are the only direct evidence in the region of a private estate, its typology and ownership. Attire and numismatic finds, imported pottery and ¹⁴C

³⁵ A. STARAC 2000: 29-31; TURKOVIĆ & BASIĆ 2013: 42.

³⁶ Lastly in MILIVOJEVIĆ 2021: 252-255; VITELLI CASELLA 2021: 155-261, both with ample previous bibliography; on Liburnia's distinct developmental trajectory, see BASIĆ 2017: 316.

³⁷ GLAVIČIĆ 2009.

³⁸ For meaning of the term "villa", see the recent ROTHE 2018; for the most recent survey results on Rab, see WELC et al. 2019; see also KONESTRA et al. 2021.

³⁹ For a definition of Roman rural or rustic settlements, see most recently in ZAMBONI 2022: 227 and the earlier bibliography therein at n. 3.

⁴⁰ KURILIĆ & OŠTARIĆ 2013.

⁴¹ LIPOVAC VRKLJAN & KONESTRA 2018a, with earlier bibliography; LIPOVAC VRKLJAN et al. forthcoming.

⁴² R. STARAC 2019.

dates place the establishment of the *figlina* in the Augustan-Tiberian era.⁴³ Early large-scale landed acquisition by a north-Italian entrepreneur,⁴⁴ accompanied by the establishment of agricultural and pottery production, can thus be inferred, while a survey of the wider Vinodol valley indicates that the *saltus* of Sextus may have been located there.⁴⁵ Other sites also yielded evidence of foreign, Italic, ownership of rural estates in the region. A significant find is a sepulchral monument from the island of Ilovik⁴⁶ that mentions a certain Cornelius, magistrate in Aquileia, whose link to the large settlement on the nearby island of Sveti Petar has been proposed.⁴⁷ The importance of the Ilovik-Sveti Petar archipelago to navigation and trade in the region is notorious,⁴⁸ thus the presence there of an important figure from early imperial Aquileia (either as an owner or in some other capacity) further supports such claims. A recently discovered inscription at Martinšćica on the island of Cres pertaining to a dedication to Diana by a certain P(ublius) Cluentiu[s] / L(uci) f(ilius) A[...],⁴⁹ further links persons from northern Italy to landed estates in Kvarner, as here too a rural settlement existed in early Roman times.⁵⁰ The most emblematic case is, however, that of the large estate identified at Caska on the island of Pag,⁵¹ where votive monuments link the estate to the Calpurnii Pisones,⁵² while finds of food processing and possibly pottery production indicate that here too a residential and productive complex existed since at least the 1st century CE, if not earlier.⁵³ The early Roman presence in extra-urban areas has been detected in Jadranovo-Lokvišća as well, but not in relation to the later architectonic complex identified in the bay as well. Here, evidence of black gloss pottery, Esquillino and radial type lamps, and numismatic finds datable to the 2nd-1st century BCE indicate very early settlement of the area, though the modes and functions have yet to be determined.⁵⁴ The

⁴³ BLEČIĆ KAVUR 2022; ILKIĆ 2018; LIPOVAC VRKLJAN & KONESTRA 2018a; OŽANIĆ ROGULJIĆ 2011.

⁴⁴ PIETRUSZKA & WYPIJEWSKI 2016.

⁴⁵ LIPOVAC VRKLJAN & KONESTRA 2018a.

⁴⁶ Transliterated: [————] / C(aio) Co[r]nelio / h(oc) [m(onumentum)] f(ecit) / Aquil[ei]ae / aed(ili) [III] vir(o) (KURILIĆ & SERVENTI 2014 (2015)).

⁴⁷ BULLY & ČAUŠEVIĆ-BULLY 2012; KURLIĆ & SERVENTI 2014(2015).

⁴⁸ BULLY & ČAUŠEVIĆ-BULLY 2012; SERVENTI 2012.

⁴⁹ Transliterated: P(ublius) Cluentiu[s] / L(uci) f(ilius) A[...]/ Dia[nae ?] / u(otum) s(oluit) l(ibens) m(erito) [... uac. ?] (ČAUŠEVIĆ-BULLY et al. 2021b).

⁵⁰ ČAUŠEVIĆ-BULLY et al. 2021b.

⁵¹ KURILIĆ 2011; RADIĆ ROSSI & BOETTO 2020. Last overview in GRISONIC & STEPAN 2022: 77-78 with earlier bibliography.

⁵² KURLIĆ 1994; 2004; A. STARAC 2000: 83.

⁵³ GRISONIC 2017; LIPOVAC VRKLJAN & KONESTRA 2018a; KONESTRA et al. 2021; GRISONIC & STEPAN 2022.

⁵⁴ R. STARAC 2002; KONESTRA 2015; BORZIĆ et al. 2022 with earlier bibliography.

necropolis on Cape Rtac,⁵⁵ which encloses Lokvišća Bay from south is evidence of early Imperial occupation.

A case study encompassing the island of Rab and dealing with funerary evidence (both archaeological and epigraphic) has shown that rural necropolises can be used as indicators for the location and chronology of both sites, and moreover shed light on several social features.⁵⁶ In fact, in numerous instances, 1st century CE sepulchral monuments are the sole evidence of settlement on the island's fields and coastal belt, and when combined with data from systematic reconnaissance or excavation, they form complementary datasets useful to determine ownership, chronology, and possibly suggest economic status. It has thus been shown that at least since the late 1st century CE the rural landscape on the islands was divided between estates in all probability belonging to both local elites (i.e. the *Baebii*) and Italic immigrants (e.g. the *Remii*) (Fig. 3b).⁵⁷ Regionally, the persons mentioned on inscriptions recovered at rural sites can be connected to the functioning of an estate in only a few cases⁵⁸: a supposed procurator from Crikvenica,⁵⁹ a person of supposedly servile status from Banjol on the island of Rab,⁶⁰ and several others from Caska,⁶¹ clearly members of the estate's staff as their functions of *villicus* and *dispensator* would suggest.

Although only very few Roman rural complexes in the region are being systematically excavated, some data on their setting, layout and productive infrastructure is available, allowing for a cursory overview. Firstly, the location of rural residential and productive settlements can be assessed, as the aforementioned surveys indicate that both (peri-)coastal and inland areas were densely settled. On both the coast and the islands, maritime and coastal complexes ("villae") developed early on, often on promontories or directly on the seashore, valuing thus not only communication possibilities and harvesting of the sea, but in all likelihood the scenic features of these locations as well.⁶² A few such sites have been investigated to various degrees on the island of Rab. There, at Kaštelina in Kapor and Zidine in Lopar

⁵⁵ R. STARAC 2002: 194.

⁵⁶ KONESTRA et al. 2021.

⁵⁷ KONESTRA et al. 2021 with earlier bibliography; KONESTRA & CAMBI 2020-2021; for a Liburnia-wide ratio see most recently in KURILIĆ & SERVENTI 2015: 17, fig. 2.

⁵⁸ See, e.g., MATIJAŠIĆ 1995 for Roman Histria.

⁵⁹ Transliterated: L(ucio) Ficilio Proclino / proc(uratori?) qui vixit / ann(os) L m(enses) XI d(ies) / XVIII Postumia / Vitalis mar(ito) fec(it) (EDH online, HD061226). LIPOVAC VRKLJAN & KONESTRA 2018a: 24; see also MATIJAŠIĆ 1995: 172-173.

⁶⁰ Transliterated: Proculo / C(ai) I(uli) Valenti[s] (servo), ann(orum) XX, / op(timo?), Proietica (vel Protica) ma[te]r f(ilio) pientiss(imo?) / [...?] (LAZINICA & MARŠIĆ 2017: 193). KONESTRA et al. 2021: 404.

⁶¹ KURILIĆ & SERVENTI 2018a: 767.

⁶² MARZANO 2018: 126-127, 136.

a terraced solution for the layout of the complexes can be envisaged thanks to the presence of possible cryptoporticos and/or *basis villae* substructure solutions⁶³ (Fig. 2/1). Similarly, part of the complex in Caska on the island of Pag was also arranged on a slope descending toward the sea, as well-preserved terracing walls seem to suggest.⁶⁴ Elsewhere, such as at Artić in Barbat (island of Rab), Njivice (island of Krk),⁶⁵ and Sveti Petar near Ilovik,⁶⁶ the architecture was arranged on lower grounds near the shore, today thus being partly submerged due to sea level change.⁶⁷ Njivice and Artić provide data on some aspects of the residential sector of the sites, including hypocaust floors possibly connected to small *thermae* or heated rooms (Fig. 2/2, Fig. 3, Fig. 4).

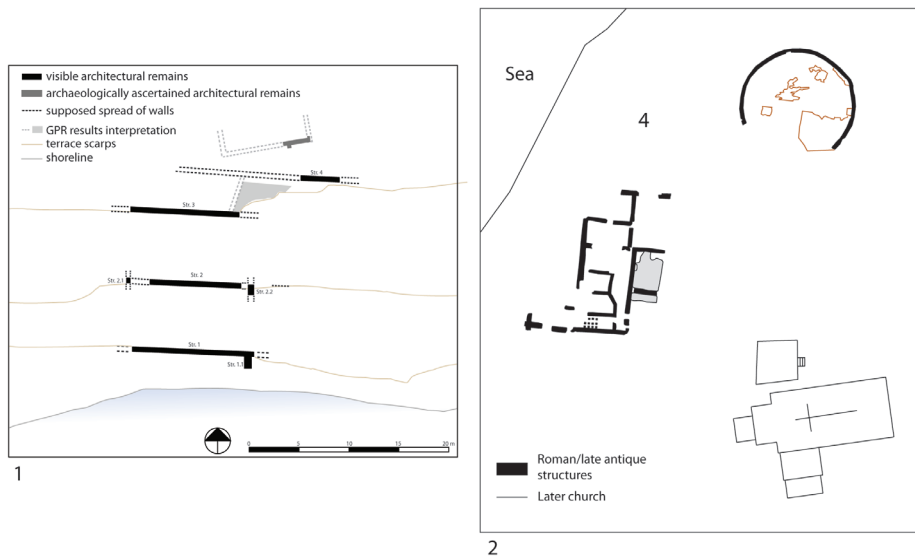


Figure 2. Layout of rural complexes: 1. Lopar-Zidine (drawing and measurement: A. Konestra, P. Androić Gračanin); 2. Njivice-Poje (not to scale, courtesy of G. Skelac, Gearheo d.o.o.)

⁶³ See lastly in JURKOVIĆ & TURKOVIĆ 2019; KONESTRA et al. 2021: 163-164.

⁶⁴ KURILIĆ 2011: Sl. 2; RADIĆ ROSSI & BOETTO 2020: 5, Fig. 4d.

⁶⁵ ČAUŠEVIĆ-BULLY 2007; VODIČKA MIHOLJEK 2015.

⁶⁶ ČAUŠEVIĆ-BULLY & BULLY 2012.

⁶⁷ E.g. RADIĆ ROSSI 2017: 558-559.

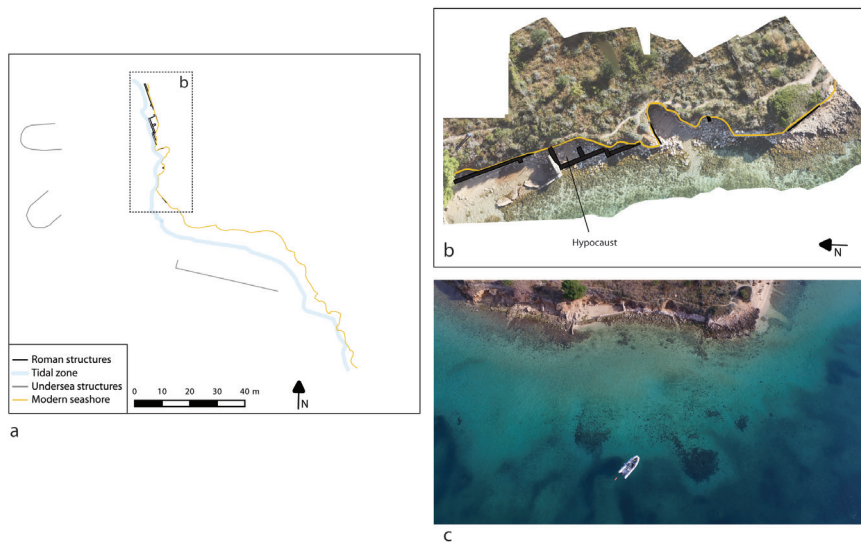


Figure 3. Barbat-Artić: a. general layout of coastal and submerged features; b. detailed plan of visible architecture (drawing, orthophoto and measurement: A. Konestra, P. Andrić Gračanin); c: aerial image of undersea remains of docking features (photo: Novena d.o.o.)



Figure 4. Hypocaust at Njivice-Poje (courtesy of G. Skelac, Geoarheo d.o.o.)

On the other hand, on the island of Rab a network of Roman sites was located away from the coast, usually on the peripheries of fertile fields or on elevated positions on them. In Kampo field they are located under the northern hillslopes and probably in the vicinity of the Franciscan St. Bernardine of Siena Monastery,⁶⁸ while

⁶⁸ KONESTRA & CAMBI 2020-2021: 366-372.

clusters of evidence are present in the area of Banjol and Supetarska Draga, often in relation to water sources (Fig. 5a).⁶⁹ Similar instances of rural sites have been ascertained on Lopar filed as well. As none have been systematically excavated and only some have undergone geophysical surveys, their layout and dimensions remain largely unknown, though movable finds do point to the long continuity of use of most, and to the presence of productive or storage features (such as vats, dolia, etc).⁷⁰ It is thus difficult to say whether they should be defined as farms, or should be linked to larger estates with complex internal organisation.

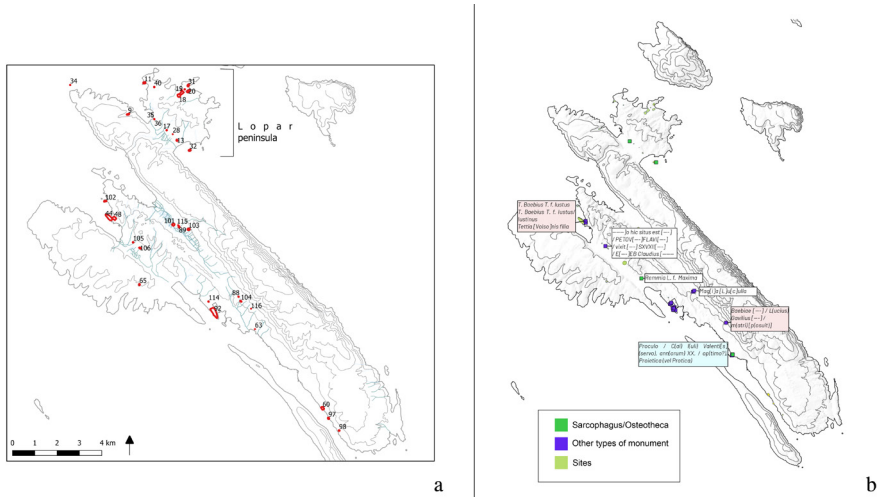


Figure 5. a – Ascertained Roman sites on the island of Rab; b – Location of sepulchral finds and transliteration of sepulchral monuments from rural areas on the island of Rab (author: A. Konestra; source: Archaeological topography of Rab Island project GIS)

Similar instances have been recorded on the adjacent islands of Krk and Pag as well. The case of Baška and its valley (Bašćanska draga) on Krk is particularly telling. There, at Jurandvor, one such complex was partially excavated, located beneath the later Church and Monastery of St. Lucy, and provisionally dated to late antiquity, although evidence of early Roman settlement is also present in the vicinity⁷¹ (Fig. 6/1).

⁶⁹ KONESTRA et al. 2021: Fig. 2.

⁷⁰ KONESTRA et al. 2017: 104-105; 2021: Fig. 2; WELC & KONESTRA forthcoming.

⁷¹ R. STARAC 2019: 60-62.

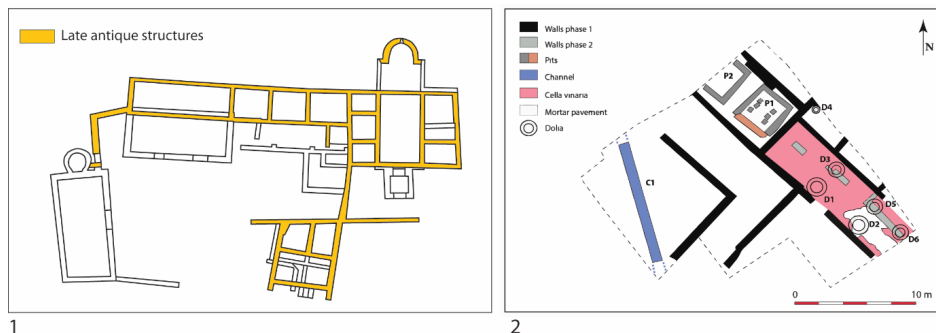


Figure 6: 1. Jurandvor-St. Lucy (elaborated after: R. STARAC 2019); 2. Pressing installations and dolia defossa at Caska (drawing: V. Pellegrino, from GRISONIC & STEPAN 2022: Fig. 3)

The structures encompass an area of roughly 30x40 m, with a sector consisting of rooms of varying dimensions around an enclosed courtyard, and other sectors extending eastward (under today's church) and southward. But settlement in the area was far more complex, as Roman settlement nuclei can be followed from the coastal area of Baška, where sporadic finds and an excavated necropolis testify to a possibly larger settlement,⁷² and throughout the valley,⁷³ often in association with late antique (or later) churches, such as in the cases of Mire⁷⁴ and Sveti Juraj.⁷⁵ Such a situation is difficult to interpret, for it may indicate sparse settlement, as in the case of several smaller landholdings or tenant farms, but also a large estate with several residential-productive units, or even be indicative of a more nuclear settlement typology, such as a *vicus* (see below). Similarly, in the areas of Caska and Kolan on the island of Pag, a series of zones with a concentration of Roman finds⁷⁶ might signal such a complex settlement organisation. By way of analogy, numerous sites in the hinterland of Crikvenica and at nearby Selce might be indicative of the extent of the estate (*saltus*) of Sextus M(e/u)tillius Maximus, although at this point it is difficult to ascertain their relationship.⁷⁷ In fact, as elsewhere on the eastern Adriatic,⁷⁸ excavations in the region usually tackled the most prominent architectural remains at a site (what might be called

⁷² BEKIĆ & VIŠNJIĆ 2008; MAROHNJIĆ 2014; R. STARAC 2019: 26.

⁷³ RENDIĆ-MIOČEVIĆ 2004: 199-200.

⁷⁴ Lastly in R. STARAC 2021.

⁷⁵ R. STARAC 2019: 25-31.

⁷⁶ KURILIĆ & OŠTARIĆ 2013: 215-277.

⁷⁷ LIPOVAC VRKLJAN & KONESTRA 2018a.

⁷⁸ E.g., see various examples in MATIJAŠIĆ 1998; BEGOVIĆ & SCHRUNK 2001; 2002.

the “villa” building or a subsequent church), while adjacent zones remain unexplored, hindering a full understanding of the actual extent of the settled area. An exception is the settlement in Podšilo Bay in Lopar on the island of Rab, where several buildings have been identified thanks to geophysical prospecting in this shallow bay’s hinterland (Fig. 7).

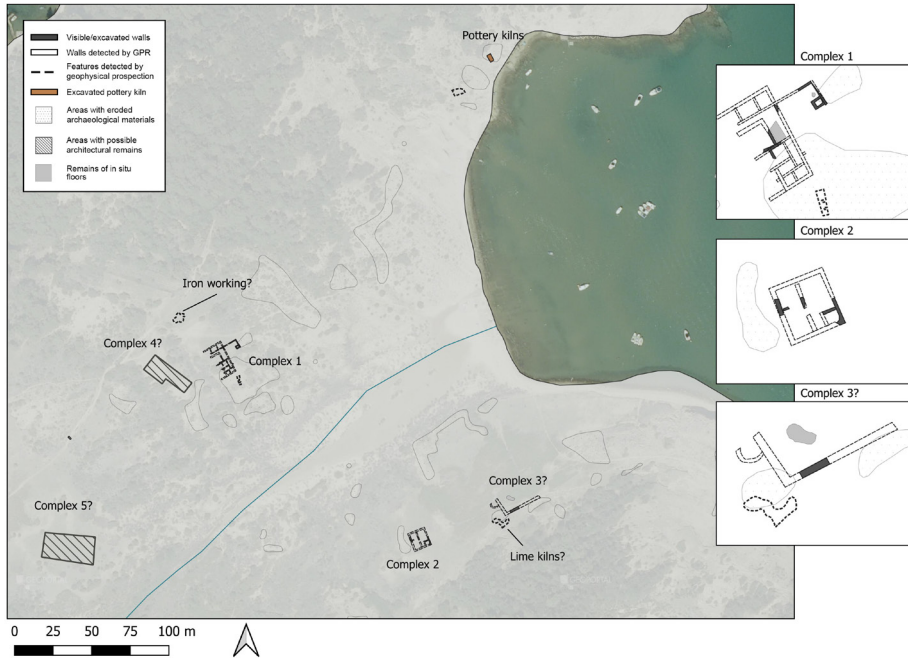


Figure 7. Organisation of the settlement at Podšilo Bay, Lopar, island of Rab (Authors: A. Konestra; F. Welc; base map: DOF DGU)

A large complex on its northern slope and smaller and/or poorly preserved buildings on the southern and western slopes⁷⁹ indicate a complex settlement organisation, along which a detached pottery production facility⁸⁰ was identified on the bay’s northern shores. While the chronology of the individual architectonic units has yet to be more precisely defined, the large northern complex (Complex 1), with rooms and corridors developing around what would seem to be a central courtyard and the smaller square building excavated on the southern slope (Complex 2) do point to contemporary, late antique phases of use, perhaps as the main residential and productive building and an ancillary storage/economic unit.⁸¹ Nevertheless,

⁷⁹ WELC et al. 2017; 2019; WELC 2018.

⁸⁰ LIPOVAC VRKLJAN & ŠILJEG 2012.

⁸¹ WELC et al. 2019; KONESTRA et al. 2020: 233-237.

early habitation of the site has been ascertained by material culture finds.⁸² Similarly, structures detected remotely in the hinterland of the complex on Cape Zidine (Lopar), may suggest that this settlement also had a more complex organisation.⁸³

Regardless of the paucity of data provided by the few more extensively excavated sites, information on the earliest organisation of productive activities at rural sites in the region can be derived from an analysis of products and infrastructure connected to certain aspects of their economy. The emblematic case of Crikvenica's pottery workshop thus helps to understand many of these aspects, firstly thanks to the aforementioned tile stamps (see above), but also to the array of amphorae produced at the site, and recognised as containers for wine, olive oil and fish products.⁸⁴ Products of the *figlina* include loom weights as well,⁸⁵ possibly indicating if not a regional, then at least textile production on the estate and perhaps the associated sheep husbandry. Moreover, road infrastructure and the possible adjacency of a favourable marine berth,⁸⁶ as well as the regionally wide distribution of products, speak in favour of market-oriented production on the wider estate. Docking facilities were identified at Artić near Barbat (Rab)⁸⁷ and Caska (Pag), the latter possibly also devoted to commercialisation of estate products.⁸⁸

Elsewhere, with the exception of Caska, where a pressing installation was unearthed (Fig. 6/2),⁸⁹ food processing can for now be only presumed on the basis of meagre data. Stone fragments belonging to parts of possible Roman presses or *molae* were identified at St. Martin, St. Fusca and Krk on the island of Krk, while remains such as *spicatum* floors or small vats (identified near Tarsatica, at Selce, Podšilo Bay on Rab, and perhaps under the Church of St. George at Mala Krasa, Fig. 9, 11) might be connected to productive spaces. A structure discovered at Njivice-Poje is enigmatic: it is a circular enclosure interpreted as a portico/courtyard, but its size, location and structure suggest its use as a threshing floor⁹⁰ (Fig. 2/2). Other reliable data for food production is scant, though fish farming troughs, and especially salt pans identified in the region, may have been established as early as Roman times.⁹¹ Similarly, a recently identified trapezoidal structure on

⁸² The materials stem from 2022 excavation campaign and are still being analysed.

⁸³ KONESTRA et al. 2021 with earlier bibliography.

⁸⁴ LIPOVAC VRKLJAN & KONESTRA 2018a: 21-23.

⁸⁵ OŽANIĆ ROGULJIĆ 2019.

⁸⁶ KONESTRA et al. 2022.

⁸⁷ LIPOVAC VRKLJAN et al. 2016.

⁸⁸ RADIĆ ROSSI & BOETTO 2020; GRISONIC & STEPAN 2022.

⁸⁹ SKELAC 2006; 2007; LIPOVAC VRKLJAN & KONESTRA 2018a; GRISONIC & STEPAN 2022: 77-80.

⁹⁰ VODIČKA MIHOLJEK 2015; for analogies in Dalmatia see GWIRTZMAN et al. 2019: 47-51.

⁹¹ GRISONIC 2022.

the Fruga plateau on Rab might be connected to sheep husbandry and possibly dated to the Roman era thanks mainly to tegulae finds.⁹²

*The changing face of northern Liburnia from the mid-Roman period
into late antiquity*

A somewhat “dark” period of rural settlement in the region spanned from the late 2nd to the 4th century, when available data fail to provide sufficient information on the evolution of identified settlements, mainly due to inadequate publication of stratigraphic assemblages.⁹³ In fact, regionally limited stratigraphic data impedes a more detailed understanding of structural changes, abandonment phases and possible reuse at most rural sites, i.e., diachronic sequencing built on a robust chronological, material culture-based framework is still lacking.

Changes in the economy of adjacent regions, chiefly northern Adriatic Italy,⁹⁴ where wine and olive oil production seem to have severely diminished from the mid-2nd century onward, changes noted in various other aspects, including settlement patterns,⁹⁵ would suggest that we could expect a similar scenario in northern Liburnia as well.

From the mid-2nd century onward, the role of northern Liburnia within the north-eastern defence system of Italy became more relevant. Tarastica and its territory, firstly inserted in the *Praetentura Italiae et Alpium*, were then part of a short-lived procuratorial province established in the late 2nd century,⁹⁶ while as of the mid-3rd/4th century,⁹⁷ the town played a vital role in the *Claustra Alpium Iuliarium (CAI)*. It was not only the seat of a garrison but also the main port supplying the network of forts and fortifications being erected in its hinterland.⁹⁸ This

⁹² For analogical structures interpreted in relation to husbandry, see BADAN et al. 1995.

⁹³ For a similar situation elsewhere in Dalmatia, see GRAČANIN 2015b, especially p. 85-86.

⁹⁴ While considering the numerous differences (be it political, organisational, etc), the area can be seen as analogous due to similar economic developments and strong reciprocal connections. Also, research into rural sites there has a long tradition and ample analogous examples to draw from (e.g. various contributions in *Antichità Altoadriatiche* XXVI, 1985; BUSANA 2002; MATIJAŠIĆ 1998; BULIĆ & MATIJAŠIĆ 2014; ZGRABLIĆ & BULIĆ 2017; ZAMBONI 2022).

⁹⁵ For an overview see MARZANO 2021: 506, 512, 515; see also BROGIOLO 1996; CASTRO-RAO BARBA 2014; GREY 2016. For the eastern Adriatic in general BEGOVIĆ & SCHRUNK 2001.

⁹⁶ SUIĆ 1955; MEDINI 1980; most recently TURKOVIĆ & BASIĆ 2013: 41; BASIĆ 2017; VITELLI CASELLA 2021: 143-156.

⁹⁷ For debates on the dating of the system, which most authors agree was constructed over a longer period of time see TURKOVIĆ & BASIĆ 2013: 44, n. 40; KOS 2014; VIŠNJIĆ 2019: 58-65.

⁹⁸ TURKOVIĆ & BASIĆ 2013: 44; KUSETIĆ 2014a: 34-35; VIŠNJIĆ 2019a; 2019b; VITELLI CASELLA 2021: 146, all with earlier bibliography.

newly developed border zone character of the wider area⁹⁹ must have influenced not only incoming, but also outgoing trade, possibly bringing a new impetus to the regional economy. The outcome of this novel geopolitical situation is visible through architectural evidence within urban and peri-urban areas, and might be related to changing economic factors in the vicinity of the *CAI*. Munificence, defensive wall construction and similar public endeavours can be seen at several towns in the region over a longer period beginning in roughly the 3rd century (e.g., Arba, Tarsatica, Senia),¹⁰⁰ while the degree to which these changes were reflected in rural areas remains poorly understood, though a certain degree of interconnect-edness might be suggested on the basis of recent survey data.¹⁰¹

In rural areas some changes can be detected as early as the mid-2nd century, when pottery production at Crikvenica apparently ceased,¹⁰² though whether this indicates major changes within the wider estate is still poorly understood, but a cessation of intensive food production and/or its massive commercialisation are evident. Several possibilities might explain such an occurrence, most notably a drastic change in produced goods or a change in the nature of the estate.¹⁰³ The site of the *figlina* was then repurposed as a small (?) necropolis dated to the late 3rd-4th century,¹⁰⁴ and sporadic frequenting of the area is attested by numismatic finds,¹⁰⁵ though no permanent structures could be ascertained. Contrary to that, on the basis of still scarce ceramic and numismatic evidence, it would appear that the site in Podšilo Bay (Rab) was first established no later than the onset of the 2nd century, while production of ceramic building materials apparently commenced later (late 3rd-4th c.),¹⁰⁶ when major architectural works seem to have occurred at several areas at the site, especially at what was identified as the main residential building.¹⁰⁷ It remains possible that part of the produced ceramics were commercialised. Other rural complexes, as proven in other parts of Dalmatia,¹⁰⁸ seem

⁹⁹ LIPOVAC VRKLJAN et al. forthcoming. See also ŠAŠEL 1970 (1992): 733.

¹⁰⁰ CIL III 10054; CAMBI 1998: 56-57; TURKOVIĆ & BASIĆ 2013: 45; VIŠNJIĆ 2019a: 57-58.

¹⁰¹ LIPOVAC VRKLJAN et al. 2017. See also ZAMBONI 2022: 227.

¹⁰² For chronology see bibliography at note 42. Comparatively for Istria see BEGOVIĆ & SCHRUNK 2001: 159-160.

¹⁰³ See for e.g. MARZANO 2021: 524 with earlier bibliography.

¹⁰⁴ OŽANIĆ ROGULJIĆ & KONESTRA 2016.

¹⁰⁵ ILKIĆ 2018.

¹⁰⁶ LIPOVAC VRKLJAN & ŠILJEG 2012.

¹⁰⁷ KONESTRA et al. 2020: 233-237.

¹⁰⁸ ZEMAN 2014: 40. According to certain scholars, in Dalmatia the period of the 4th-5th centuries, i.e., from the reign of Diocletian onward, is one of large villas - praetoria, and not rustic villas (e.g., TURKOVIĆ & MARAKOVIĆ 2012: 63), though in northern Liburnia no such site has so far been identified. For praetoria see lastly in CASTRORAO BARBA 2020: 108-109 with bibliography therein.

to have been erected or more substantially renovated in the same time frame: Jadranovo-Lokvišća on the coast,¹⁰⁹ Jurandvor,¹¹⁰ Sveti Krševan¹¹¹ and Cickini¹¹² on the island of Krk, and Caska¹¹³ on the island of Pag.

Perhaps the most drastic and monumental change that impacted rural areas from the late 4th/5th century onward is the formation of a network of early Christian churches.¹¹⁴ Often placed within earlier or in some cases perhaps contemporary residential-productive complexes, on their outskirts or near communication routes,¹¹⁵ their location points to a renewed investment in the countryside, but also to the level of rural settlement, clearly still populous and vibrant.¹¹⁶ Some of them, furnished with a baptistery or those with a funerary function, were clearly erected as focal points of a larger settlement or wider area, on some occasions financed by their own inhabitants.¹¹⁷ Unique evidence is provided by the inscriptions on the mosaic pavement of the basilica at Mire near Baška (late 4th-5th c.), where the names of the members of several families (12 cornices are preserved)¹¹⁸ point to a communal investment in the erection and furnishing of the church.¹¹⁹ The latter

¹⁰⁹ R. STARAC 2002.

¹¹⁰ R. STARAC 2019: 60-61.

¹¹¹ JANEŠ 2015.

¹¹² R. STARAC 2022.

¹¹³ KURILIĆ 2011.

¹¹⁴ For Krk: BARAKA PERICA 2013: 129-135; Rab: JURKOVIĆ 2019 with earlier bibliography. For a regional overview, see ČAUŠEVIĆ-BULLY & BULLY 2020 with earlier bibliography. For other areas, see LEWIT 2003: 271; BOWES & GUTTERIDGE 2005; BOWES 2018.

¹¹⁵ MIGOTTI 1994/95: 118-120; R. STARAC 2000: 231; BARAKA PERICA 2013: 141, 157-158; for other areas, see BROGIOLO & CHAVARRIA ARNAU 2018: 186-187.

¹¹⁶ MATIJAŠIĆ 2012: 157-158, see also LEWIT 2003; ZGRABLIĆ & BULIĆ 2017: 61.

¹¹⁷ They could be defined as “pre-parishes”, see in BARAKA PERICA 2013: 156-157.

¹¹⁸ Transliteration: Saprilla / apsida(m) c/um secr/ [e]taria f(e)c(it) (in the presbytery area)
 Procli/ [n]us cum / [sui]s fecit.
 F[lo]ren/tius et / Victori/na fec(e)r(unt).
 V[it]alis /cum su/is fe[ci]t.
 [----]/anus e[t] / Venan/tia f(e)c(e)r(un)[t].
 Marcia/nus et Ti/tisenia / et Sidoni/us f(e)c(e)r(un)[t].
 C[le]men/s cum su/is fecit.
 Pancra(tius) / et Proc/la c[um] / suis f(e)c(e)r(unt).
 Verecun---/ et Victura / [cu]m suis [fece]runt.
 Alexan/der et Iu/lia cum suis f(e)c(e)r(un)t.
 [--]ianus / [e]t Genero/[s]a cum / [s]uis f(e)c(e)r(un)t.
 Sarma/ [---]a / [---] [s]uis f(ecit).
 [---]vodiv / [---] (lastly in R. STARAC 2021: 164, 169)

¹¹⁹ KURILIĆ & SERVENTI 2016; R. STARAC 2021. Saprilla’s inscription clearly states that the structure (or at least some parts thereof) was erected and not only decorated thanks to private investment.

evidence might also indicate that rural settlement is here organised in a radically different way than before, that is, we may read it as evidence of a *vicus* or as the emergence of a village type of habitation,¹²⁰ with single family habitation units. At this point, though, the way in which such settlement may be related to forms of land ownership in the region is still unclear, though certain architectural traits might shed some light on the matter. In fact, on other occasions, the church building seems to be in direct contact with a clearly residential building¹²¹ of late antiquity, as in Cickini (island of Krk)¹²² and probably Martinšćica (island of Cres). In the first case, a square, probably multi-story building was explored in close proximity to a church with baptistery¹²³ (Fig. 8), the latter erected on the faint remains of an earlier architecture, present in the site's environs as well.



Figure 8. Aerial image of Cickini site (photo: S. Ilić, courtesy of PPMHP Rijeka)

The ground floor comprises a large hallway flanked by smaller rooms, leading to a centrally positioned room furnished with an apse. The presence of a possibly later added apse was ascertained within the still unexplored residential complex at Martinšćica as well.¹²⁴ Such solutions stem from the urban architecture of the

¹²⁰ E. g. BOWES & GUTTERIDGE 2005: 410-413; BROGIOLO & CHAVARRIAARNAU 2018: 187.

¹²¹ SFAMENI 2012: 53-54.

¹²² The complex endured, with renovations, from the 5th to 7th c., R. STARAC 2022: 140.

¹²³ Lastly in R. STARAC 2022 with earlier bibliography.

¹²⁴ ČAUŠEVIĆ-BULLY et al. 2021a.

4th century, serving the function of receiving guests (banqueting and audiences) and to fulfil the strategy of self-representation by the late Roman elites.¹²⁵ This feature might then be indicative of a renewed interest by the elites (*possessores*) in residing in rural areas and signal the existence of large landed possessions characterised by a central more or less luxurious building and a series of detached habitation nuclei, often at a certain distance, as identified in other regions during the 4th and 5th centuries.¹²⁶ Regionally, still lacking a clear and precise chronology, such aspects should be better investigated in the future, just as more light should be shed on the relationship of these residential complexes with adjacent churches.¹²⁷ On the other hand, in several cases the churches were erected directly on earlier structures, as in the case of two churches in the environs of Punat, on Krk, i.e., St. Peter at Kanajt and St. George-Mala Krasa (Fig. 9).¹²⁸

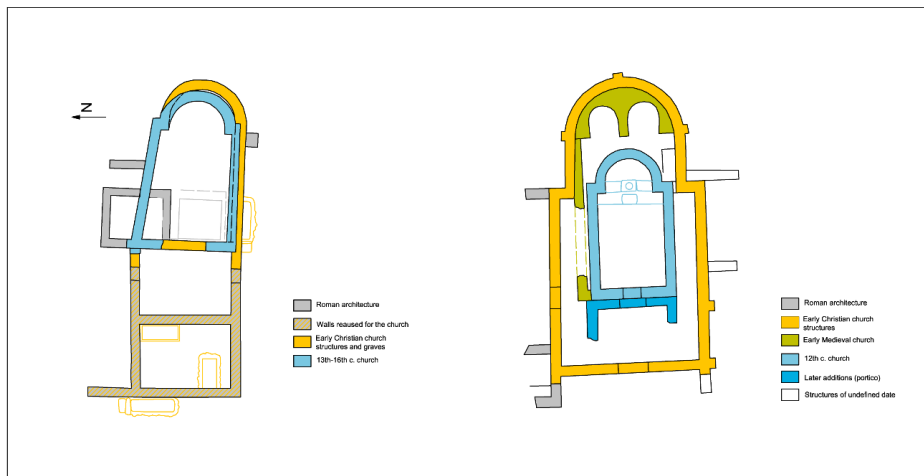


Figure 9. Layout of the various building phases detected at the sites of St. George-Mala Krasa and St. Peter-Kanajt near Punat (Krk Island) (elaboration on the bases of R. STARAC 2004: fig. 1, 3)

Evidence of sepulchral practices in the environs of rural settlements, or within them, and in connection to with Early Christian churches, is another indicator

¹²⁵ SFAMENI 2012: 54; ZEMAN 2014: 39; MARANO 2016: 111-117.

¹²⁶ E. g. SFAMENI 2012: 54-55; BRIGIOLO & CHAVVARIA ARNAU 2018: 185. The famous epistle of St. Jerome mentioning his “*villula*” (*Ep. LXVI* dated to 397 CE), if his estate was actually located in Liburnia, might be the only historic reference to late antique rural residences, their management and *possessores* in the region (SUIĆ 1986: 236–237; see lastly in DOMIĆ KUNIĆ 2021 with extensive previous bibliography).

¹²⁷ E.g. BOWES & GUTTERIDGE 2005: 413; SFAMENI 2012: 60-61; ZEMAN 2014: 40; CASTRORAO BARBA 2014: 277-281, n. 31 with earlier bibliography.

¹²⁸ R. STARAC 2004.

of the continued occupation of rural areas.¹²⁹ However, interment inside earlier productive or inhabited areas was ascertained only in two cases: at Crikvenica (see above) and Caska,¹³⁰ both related to infant/child burials. Reuse of residential-productive areas for burial seems to be regionally rare, and is usually marked by single burials.¹³¹ The graves made of “bricks” at Njivice-Poje could be added, though data is too meagre to ascertain a precise location, typology and chronology.¹³² On the other hand, at certain sites, such as Baška-St. Mark¹³³ and Jadranovo-Lokvišća,¹³⁴ the continuation of earlier necropolises has been ascertained at least within the 4th century. One tomb with multiple, mostly child interments dated to the 4th-early 5th century was recently excavated at Pudarica on the island of Rab; it was clearly part of a wider burial ground, and might suggest the existence of dedicated burial areas, perhaps with sectors for children, located on the outskirts of rural settlements.¹³⁵ The shift to interments inside (usually the vestibule) or in immediate vicinity of Early Christian churches¹³⁶ seems to have been regionally typical. Expensive interment solutions (such as sarcophaguses), speak in favour of elite burials in connection to some of the identified churches (e.g., Mire near Baška on Krk, Church of St. Stephen in Barbat and perhaps Lopar on Rab, island of Sveti Petar near Ilovik),¹³⁷ though several burial typologies have been identified (stone-built, vaulted, simple pits, etc),¹³⁸ rendering identification of social differentiation more complex. Data derived from sarcophaguses typology and other finds might indicate a rather late, later 5th-6th century, occurrence of such a practice which seemingly lasted into the 7th century,¹³⁹ though data does not suffice to define this as a trend.

¹²⁹ BARAKA PERICA 2013: 157; KONESTRA et al. 2017: 105-107; 2021.

¹³⁰ KURILIĆ 2011.

¹³¹ KURILIĆ & SERVENTI 2018b: 460.

¹³² BOLONIĆ & ŽIC ROKOV 1977: 443. In any case, an earlier (at least early medieval) phase is presumed for the nearby Church of St. Mary.

¹³³ BEKIĆ & VIŠNJIĆ 2008: 236.

¹³⁴ R. STARAC 2002: 198.

¹³⁵ KONESTRA et al. 2021: 397-399, with earlier bibliography.

¹³⁶ See KURILIĆ & SERVENTI 2018b: Map 2, 461, for maps and lists of late antique burials in the region.

¹³⁷ BULLY & ČAUŠEVIĆ-BULLY 2012; BARAKA PERICA 2018: Fig. 1, 409-410; JURKOVIĆ 2019; KONESTRA et al. 2021: 405; R. STARAC 2021: 169. Fragments of sarcophaguses have been found at Jadranovo-Lokvišća as well, though a church has not yet been identified there (R. STARAC 2002: 198).

¹³⁸ KURILIĆ & SERVENTI 2018b.

¹³⁹ E. g. Mala Krasa-St. George on Krk (R. STARAC 2004: 231), St. Lawrence-Banjol (BROGIOLO et al. 2017) on Rab. For sarcophaguses, see most recently BARAKA PERICA 2018, especially p. 403.

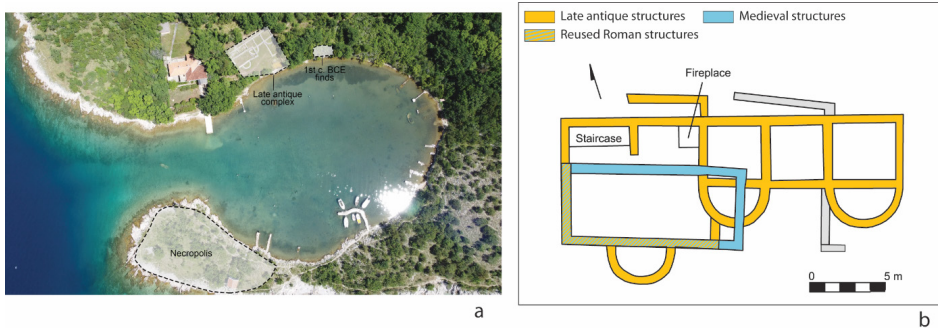


Figure 10. a. Aerial image of Jadranovo-Lokvišća site with main archaeological zones marked (photo: A. Konestra); b. Layout of the late antique complex at Jadranovo-Lokvišća (elaborated after: R. STARAC 2002 and later plan courtesy of MGC)

The already mentioned militarisation of the region seems to have continued under Ostrogoth and Byzantine rule in the form of a more pronounced fortress construction¹⁴⁰ which strongly altered the region's landscape, while the only instance of a "fortified" rural complex might be that of Jadranovo-Lokvišća (Fig. 10).¹⁴¹ As opposed to the situation in neighbouring Istria, where a good number of historic sources informs us on both the economy of the region during Ostrogoth rule and the subsequent changes after the establishment of the Exarchate at Ravenna,¹⁴² sources for Kvarner are scant. Apart from data testifying to it being administratively isolated from the wider Liburnian territory as the short-lived entity of *Liburnia Tarsaticensis*,¹⁴³ and to the existence of a *commes insulae Curictanae and Celsinae* (as reported by Cassiodorus in *Variae*),¹⁴⁴ historiography provides very little data for the Ostrogoth period¹⁴⁵ or later.¹⁴⁶ Of particular interest here is a possible reference to Kvarner contained in the letter by Cassiodorus, *Provincialibus Histriae Senator PPO* (12.22), dated to 537/538, which praises the islands and their maritime utility, as well as their fertility.¹⁴⁷ Nevertheless, more

¹⁴⁰ GOLDSTEIN 2005: 27; DŽINO 2010: 79; MATIJAŠIĆ 2012: 228-229; TURKOVIĆ & BASIĆ 2013: 58.

¹⁴¹ R. STARAC 2002. The layout speaks in favour of a structure with semi-towers, but their actual fortification function is doubtful, and might rather be linked to late antique palaces.

¹⁴² MATIJAŠIĆ 1988; NOVAK 2007; BILETA 2011; BRATOŽ 2016; most recently and extensively in GRAČANIN 2019.

¹⁴³ MATIJAŠIĆ 2012: 176-177, 198; TURKOVIĆ & BASIĆ 2013.

¹⁴⁴ GRAČANIN 2015a: 16, 22-24; ARNOLD 2016: 76.

¹⁴⁵ For Dalmatia see GRAČANIN 2015a: 11, 46.

¹⁴⁶ On the nature of Byzantine sources, see GOLDSTEIN 1992: 12-13; see also GRAČANIN & KARTALIJA 2018.

¹⁴⁷ See in GRAČANIN 2015a: 17-18, 50-51.

or less contemporary data on rural settlement has recently been ascertained in the cases of Podšilo Bay, Jurandvor and Jadranovo-Lokvišća, possibly testifying to abandonment and re-use/re-settlement of dilapidated rural buildings. In the first case, a series of postholes has been ascertained both in the southern and northern complex; in the latter a small hearth laid above a no longer used mortar floor points to an at least partial habitation character of these reoccupations, while in the former a waste pit containing apparent kitchen discards might indicate the presence of an area for food preparation somewhere in the vicinity (Fig. 11).

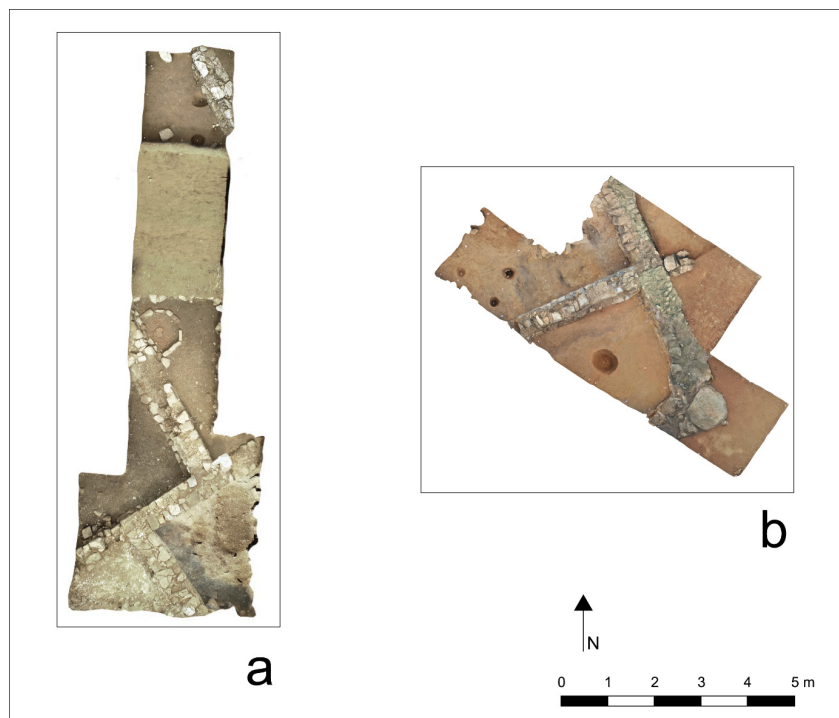


Figure 11. a - Trench 2 at Complex 1 in Podšilo Bay – earlier walls, postholes and hearth; b – Trench 1 at Complex 2 in Podšilo Bay – earlier walls, postholes and pit (Orthophotos: K. Rabiega)

The fact that such evidence was ascertained at both locations in Podšilo Bay speaks in favour of a multi-family (or multi-group) re-occupation of the site,¹⁴⁸ though its duration and character are still unclear. The analysis of finds point to a 6th-7th century chronology of these features.¹⁴⁹ Finds of iron slag indicate recycling and spoliation activities going on at the site,¹⁵⁰ while the evidence for marine har-

¹⁴⁸ E.g. BOWES & GUTTERIDGE 2005: 410.

¹⁴⁹ NOWACKI et al. 2022.

¹⁵⁰ KONESTRA et al., 2022.

vesting activities (e.g., shells, lead fish-net weights) is extensive. At Jurandvor, along with traces of repair of the floors, a hearth found above an earlier floor and below the foundation of the later Benedictine monastery equally points to subsequent habitation of the perhaps already ruined villa.¹⁵¹ A hearth built with the fragments of a sarcophagus was found inside the complex at Jadranovo-Lokvišća, but as its dating is uncertain, it might date to later periods.¹⁵² Whether such data could be linked to a population shift toward other sites or forms of habitation, a different use of a certain sector of an estate or indicate an overall social and economic shift¹⁵³ has yet to be better understood. The aforementioned Ostrogoth sources, however, generally very occupied by the middle class *possessores*, chiefly as tax payers, would suggest that estate production as well as commerce were still well developed.¹⁵⁴ Another common late antique phenomenon has been noted in the region, that is, the introduction of extra-urban and rural features in towns – mainly necropolises and productive features.¹⁵⁵ Such was the case of municipium Fulfinum on the island of Krk, where a late antique necropolis is located just a few dozen of meters from the forum, and a pressing installation (olive processing?) has been ascertained adjacent to a suburban residential complex with a substantial 5th-6th century phase of use.¹⁵⁶

Concluding remarks and future avenues of research

Though patchy, our knowledge of several aspects of extra-urban territorial organisation, resource exploitation and settlement in northern Liburnia has grown substantially in recent years. So much so that diachronic development can now be proposed, certainly open to further fine tuning of and great insight into certain aspects. Moreover, the rural landscape can now be populated with actual actors involved in the development of landed estates and the establishment of the earliest residential and productive complexes in the region. Most importantly, local pre-Roman elite families, now living alongside immigrants of diverse socio-political backgrounds, seem to have maintained their social roles and possibly their estates, whose actual nature we may now begin to understand. The paucity of historic sources does impede an understanding of legal matters, the conveyance of property and the social status of those involved in production,

¹⁵¹ R. STARAC 2019: 61. The authors would like to thank Ranko Starac (PPMHP, Rijeka) for further information on this aspect.

¹⁵² R. STARAC 2002: 197.

¹⁵³ E.g. WICKHAM 2005: 473-481; DŽINO 2017: 157; BOWES 2018: 461.

¹⁵⁴ Generally in GRAČANIN 2015a: 51-57, 66; also MATIJAŠIĆ 2012: 171

¹⁵⁵ For adjacent areas see e.g. MATIJAŠIĆ 2007; KOPAČKOVA 2020.

¹⁵⁶ ČAUŠEVIĆ-BULLY 2014; ČAUŠEVIĆ-BULLY & BULLY 2015.

though some hint of these aspects can now also be proposed. Perhaps the most important conclusion that can currently be drawn is that early urban development of the region's municipia was accompanied by an equally early organisation of rural areas, the two functioning side-by-side and not in a strictly hierarchical relationship,¹⁵⁷ and in which both locals and immigrants played an important role (Crikvenica, Caska, island of Rab).

For later periods, which see the transformation of earlier rural complexes along different trajectories dictated by major political, social and cultural changes¹⁵⁸ (e.g. the growing importance of the region in Italy's defence system, changes in the Adriatic economic and trade systems, Christianity, etc), we can begin to recognise patterns detectable in adjacent areas as well.¹⁵⁹ The demise of large-scale production or its radical change seems to occur contemporarily as elsewhere along the Adriatic,¹⁶⁰ perhaps indicative of more widespread socio-political or economic phenomena. The dispersed pattern of rural residences ("villas"), that is, estate centres¹⁶¹ and farms, seems to change with the onset of the 5th century; "centrality" is now provided by a church building often associated with new or refurbished rural residences, early forms of villages and fortified settlements.¹⁶² Communal use can be recognised through the combination of functions that such churches often had along with *cura animarum*, that is, baptism and/or burial.¹⁶³ Evidence from Mire near Baška indicates very well how newly-developed local communities perceived and engaged with such sacral buildings.

The trajectories, modes and outcomes of the detected changes in settlement and productivity seem to be recognisable in a wider, Adriatic area, where they have been attributed to a series of factors, e.g., changes in the structure of land ownership, changing climate conditions, changes in trade networks or transport containers and many more.¹⁶⁴ What seems to differ, compared to the general Western European situation dated to the mid-5th century,¹⁶⁵ is perhaps the longer continuity of use of the "villa" as the residence of a *possessores*, while evidence of different modes of settlement, as those discerned at Podšilo and more tentatively Jurandvor, see their onset not earlier than the 6th century. In any case, while

¹⁵⁷ ZAMBONI 2022: 227 with earlier bibliography.

¹⁵⁸ E.g. BROGIOLO & CHAVARRIA ARNAU 2018: 179; CASTRORAO BARBA 2020: 294-295.

¹⁵⁹ LEWIT 2003; CASTRORAO BARBA 2014: 262; 2020: 14-39.

¹⁶⁰ MARZANO 2021: 514-515, 518.

¹⁶¹ As in WICKHAM 2005: 467. See also TURKOVIĆ & ZEMAN 2011: 19.

¹⁶² WICKHAM 2005: 469; BOWES 2018: 461, 463.

¹⁶³ BOWES 2018: 463.

¹⁶⁴ MARZANO 2021: 525-527.

¹⁶⁵ BROGIOLO & CHAVARRIA ARNAU 2018: 179; BOWES 2018: 459-460, and earlier bibliography at n. 49.

these processes are beginning to be better understood in their materiality, a firm chronology is still far from being defined.

The nature of economic activities in the first centuries BCE can, at least in certain cases, be partly assessed (agriculture, animal husbandry and possibly fishing and other harvesting of marine life), while productive activities in the later phases of rural settlement still remain largely unknown. What seems certain is a lack of large productive facilities as those present earlier (e.g. the *figlina* at Crikvenica), thus a change in scale of production should be envisaged. Re-use and recycling as the last activities at former villa sites may be proposed mainly based on the evidence from Podšilo Bay.¹⁶⁶ On the other hand, scanty historic sources may testify to agriculture as a still vital branch of the rural economy well into late antiquity.¹⁶⁷

While leaving many open questions, the case studies examined herein have shown that a micro-regional approach to the history of extra-urban areas can shed light on specific occurrences and trajectories, which often do find parallels elsewhere, but whose explanations cannot be readily transferred without the pitfalls of over simplification.¹⁶⁸ Thus, further publications of stratigraphic contexts along with growing attention to material culture studies will certainly illustrate with much greater nuance the evidence herein of the evolution of rural settlement processes in northern Liburnia.

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¹⁶⁶ E.g. MUNRO 2012; CASTRORAO BARBA 2017.

¹⁶⁷ See above and n. 147.

¹⁶⁸ E.g. MARZANO 2021: 527.

Historical sources

Sancti Eusebii Hieronymi Stridonensis presbyteri epistolae secundum ordinem temporum adamussim digestae et in quattuor classes distributae, ed. J.-P. Migne, *Patrologiae cursus completus, Series latina*, vol. 22, Paris, 1845., 325–1224 (<http://www.patrologia-lib.ru/patrolog/hieronym/epist/epist03.htm>) (retrieved 16 September 2022).

Abbreviations

CIL III – *Corpus Inscriptionum Latinarum*, Vol. III *Inscriptiones Asiae, provinciarum Europae Graecarum, Illyrici Latinae*. Edidit Th. Mommsen, 1873.

EDH – Epigraphic Database Heidelberg. <https://edh-www.adw.uni-heidelberg.de/home/> (retrieved 15 September 2022).

Bibliography

ANDROIĆ GRAČANIN, Paula, Fabian WELC, Ana KONESTRA, Bartosz NOWACKI. 2020. An integrated geoarchaeological approach to Late Iron Age settlement at the Kaštelina hillfort (Lopar, Island of Rab, Croatia) using Amplitude Data Comparison (ADC) method and trial excavation. *Polish Archaeology in the Mediterranean* 29-2: 447-467.

Antichità Altoadriatiche XXVI, 1985. *Aquileia, la Dalmazia e l'Ilirico Vol. I*. Trieste: EUT Edizioni Università di Trieste.

ARNOLD Johnatan J. 2016. Ostrogothic Provinces: Administration and Ideology. In *A Companion to Ostrogothic Italy*, eds. Jonathan Arnold, Shane Bjornlie, Kristina Sessa, 74-97. Leiden - Boston: Brill.

BADAN, Otello, Jean-Pierre BRUN, Gaetan CONGÈS. 1995. Les bergeries romaines de la Crau d'Arles. Les origines de la transhumance en Provence. *Gallia* 52: 263-310.

BARAKA PERICA, Josipa. 2013. Chiese battesimali rurali dell'arcipelago dalmata. *Rivista di archeologia cristiana* 87: 119-168.

BARAKA PERICA, Josipa. 2018. The late antique sarcophagi in Liburnia (between the 4th and the 6th century). In *The Basilica of St Sophia During the Transition from Paganism to Christianity. International scientific conference, Sofia, March 11–13, 2014*, Vol. VII, 397-417. Serdica – Sredets – Sofia.

BASIĆ, Ivan. 2017. Dalmatiae, Dalmatiarum: a study in historical geography of the Adriatic (in the light of the new inscription from Córdoba). In DEMICHELI 2017: 309-333.

BATOVIĆ, Šime. 2003. Stanje istraživanja prapovijesti na Kvarnerskim otocima. *Diadora* 21: 253-348.

BEGOVIĆ, Vlasta, Ivančica SCHRUNK. 2001. Preobrazbe rimskih vila na istočnom Jadranu u kasnoj antici i ranom srednjem vijeku. *Prilozi Instituta za arheologiju u Zagrebu* 18:157-172.

BEGOVIĆ, Vlasta, Ivančica SCHRUNK. 2002. Rimske vile Istre i Dalmacije, I. dio: pregled lokaliteta. *Prilozi Instituta za arheologiju u Zagrebu* 19: 113-130.

- BEGOVIĆ DVORŽAK, Vlasta, Ivančica DVORŽAK SCHRUNK. 2004. Rimske vile u Istri i Dalmaciji III - Maritimne vile. *Prilozi Instituta za arheologiju u Zagrebu* 21: 65-90.
- BEKIĆ, Luka, Josip VIŠNJIĆ. 2008. Južni dio antičke nekropole na položaju Sv. Marko – Baška. *Vjesnik Arheološkog muzeja u Zagrebu* 41: 209-257.
- BELAMARIĆ, Joško, Radoslav BUŽANČIĆ, Davor DOMANČIĆ, Jasna JELIČIĆ RADONIĆ, Vanja KOVAČIĆ. 1994. *Ranokršćanski spomenici otoka Brača* [Posebna izdanja 6]. Split: Regionalni zavod za zaštitu spomenika kulture - Split.
- BELOŠEVIĆ, Janko. 1991/92. Ishodi pete, završne kampanje istraživanja lokaliteta crkвина u selu Galovcu kod Zadra. *Radovi FFZd* 31(18): 121-142.
- BERTRAND, Audrey, Emmanuel BOTTE, Kristina JELINČIĆ. 2022. De la surveillance des mers à l'exploitation des terres. *Melanges de l'École française de Rome - Antiquité* 134-1: 71-88.
- BILETA, Vedran. 2011. At the Crossroads of Late Antiquity and Early Middle Ages - The Rise and Fall of the Military Elite of Byzantine Histria. *Annual of Medieval Studies at CEU* 17: 100-123.
- BINTLIFF, John L. 2018. The development of surface survey in the Mediterranean. A brief history. In *Funde in der Landschaft. Neue Perspektiven und Ergebnisse archäologischer Prospektion* [Materialien zur Bodendenkmalpflege im Rheinland 26], eds. Christine Wohlfahrt, Christoph Keller, 151-158. Bonn: LVR-Amtes für Bodendenkmalpflege im Rheinland.
- BLEČIĆ KAVUR, Martina. 2015. *Povezanost pespektive / A coherence of perspective*. Koper-Lošinj: University of Primorska Press, Lošinjski muzej.
- BLEČIĆ KAVUR, Martina. 2022. Inside fashion fusion: Fibulae from Crikvenica. In LIPOVAC VRKLJAN, KONESTRA I ETEROVIĆ BORZIĆ 2022: 3-19.
- BOLONIĆ, Mihovil, Ivan ŽIC ROKOV. 1977. *Otok Krk kroz vijekove*. Zagreb: Kršćanska sadašnjost.
- BORZIĆ, Igor. 2009. Karakteristike naseljenosti otoka Korčule u Antičko doba. *Izdanja HAD-a* 26, 27-42.
- BORZIĆ Igor, Mate PARICA, Mato ILKIĆ, Tea ROSIĆ. 2022. An underwater archaeological survey of Havišće and Lokvišća Coves and Cape Ertak. In LIPOVAC VRKLJAN, KONESTRA I ETEROVIĆ BORZIĆ 2022: 94-105.
- BOWDEN, William. 2018. Villas of the Eastern Adriatic and Ionian Coastlands. In MARZANO I MÉTRAUX 2018: 377-398.
- BOWES, Kimberly. 2018. Christianization of villas. In MARZANO I MÉTRAUX 2018: 453-464.
- BOWES, Kimberly. 2020. Introduction: Inventing Roman Peasants. In *The Roman Peasant Project 2009-2014: Excavating the Roman Rural Poor*, ed. Kimberly Bowes, 1-18. Philadelphia: University of Pennsylvania Press.
- BOWES, Kimberly, Adam GUTTERIDGE. 2005. Rethinking the later Roman landscape. *Journal of Roman Archaeology* 18, 405-413.
- BRADANOVIĆ, Marijan, Miljenko JURKOVIĆ (eds.). 2021. MENS ACRIS IN CORPORA COMMODO - zbornik povodom sedamdesetog rođendana Ivana Matejčića /

Festschrift in Honour of the 70th Birthday of Ivan Matejčić, eds. Marijan Bradanović, Miljenko Jurković. Zagreb-Motovun: Međunarodni istraživački centar za kasnu antiku i srednji vijek Sveučilišta u Zagrebu.

- BRATOŽ, Rajko. 2016. La produzione e il consumo di alimenti nella provincia della Venetia et Histria al tempo dei Goti orientali. In *L'alimentazione nell'antichità. Atti della XLVI settimana di studi aquileiesi. Aquileia, Sala del Consiglio Comunale (14-16 maggio 2015)*, [Antichità Altoadriatiche 84], ed. Giuseppe Cuscito, 131-158. Trieste: Centro di Antichità Altoadriatiche, Editreg.
- BROGIOLO, Gian Pietro (ed.). 1996. *La fine delle ville romane: trasformazioni nelle campagne tra tarda antichità e alto medioevo, I° convegno archeologico del Garda (Gardone Riviera, 14 ottobre 1995)*. Mantova: SAP.
- BROGIOLO, Gian Pietro, Alexandra CHAVARRIA ARNAU, Federico GIACOMELLO, Miljenko JURKOVIĆ, Goran BILOGRIVIĆ. 2017. The Late Antique Church of Saint Lawrence, Banjol (Island of Rab, Croatia) – Results of the First Two Archaeological Campaigns (2015–2016). *Hortus Artium Medievalium* 23-2: 666-675.
- BROGIOLO, Gian Pietro, Alexandra CHAVARRIA ARNAU. 2018. Villas in northern Italy. In MARZANO I MÉTRAUX 2018: 178-195.
- BULIĆ, Davor, Robert MATIJAŠIĆ. 2014. L'architettura rurale romana dell'agro polese in luce delle indagini recenti. *Studia Universitatis Hereditatis* 1-2: 119-135.
- BULLY, Sébastien, Morana ČAUŠEVIĆ-BULLY. 2012. Sv. Petar - Ilovik, bitna pomorska postaja od antike do srednjeg vijeka. *Histria Antiqua* 21: 413-426.
- BUSANA, Maria Stella. 2002. *Architetture rurali nella Venetia romana*. Roma: L'Erma di Bretschneider.
- CAMBI, Nenad. 1998. Skupine carskih kipova u rimskoj provinciji Dalmaciji. *Histria Antiqua* 4: 45-61.
- CASTRORAO BARBA, Angelo. 2014. Continuità topografica in discontinuità funzionale: trasformazioni e riusi delle ville romane in Italia tra III e VIII secolo. *Post-Classical Archaeologies* 4: 259-296.
- CASTRORAO BARBA, Angelo. 2017. Metalworking in the 'Post-Classical' phases of Roman Villas in Italy (5th-7th centuries AD). *Melanges de l'École française de Rome - Moyen Âge* 192-2: 411-425.
- CASTRORAO BARBA, Angelo. 2020. *La fine delle ville romane in Italia tra Tarda Antichità e Alto Medioevo (III-VIII secolo)* [Munera, Studi storici sulla Tarda Antichità 49]. Bari: Edipuglia.
- CHAVARRIA ARNAU, Alexandra. 2007. *El final de las villas en Hispania (siglos IV-VIII)* [Bibliothèque de l'Antiquité Tardive 7]. Turnhout: Brepols.
- CHAPMAN, John C., Robert SHIEL, Šime BATOVIĆ. 1996. *The Changing Face of Dalmatia: Archaeological and Ecological Studies in a Mediterranean Landscape* [Reports of the Research Committee of the Society of Antiquaries of London, No. 54]. London: Society of Antiquaries of London, Leicester University Press.
- ČAČE, Slobodan. 1982. Liburnske zajednice i njihovi teritoriji. *Domesti* XV-12: 41-52.
- ČAUŠEVIĆ-BULLY, Morana. 2007. Lokalitet - Njivice, Poje. *Hrvatski arheološki godišnjak* 3: 300-301.

- ČAUŠEVIĆ-BULLY, Morana. 2014. La ville de Fulfinum (île de Krk). Nouveau regard sur le sort d'une ville antique entre l'Antiquité tardive et le haut Moyen âge. *Hortus Artium Medievalium* 20: 157-169.
- ČAUŠEVIĆ-BULLY, Morana, Sébastien BULLY. 2015. Archipel du Kvarner (Croatie). *Chronique des activités archéologiques de l'École française de Rome [En ligne], Balkans*, DOI: <https://doi.org/10.4000/cefr.1405> (retrieved 21 September 2022).
- ČAUŠEVIĆ-BULLY, Morana, Sébastien BULLY. 2020. Najnovija istraživanja ranokršćanskih "crkvenih sklopova" Kvarnera: na razmeđu arhitekture i teritorija. In *Zbornik I. skupa hrvatske ranokršćanske arheologije*, eds. Mirjana Sanader, Domagoj Tončinić, Iva Kaić, Vinka Matijević, 271-290. Zagreb: FF Press.
- ČAUŠEVIĆ-BULLY, Morana, Sébastien BULLY, Jessy CROCHAT, Pascale CHEVALIER. 2021a. Quelques considérations sur l'architecture et les installations liturgiques de l'église paléochrétienne de Martinšćica (Punta Križa, île de Cres). In BRADANOVIĆ, JURKOVIĆ 2021: 163-180.
- ČAUŠEVIĆ-BULLY Morana, Sébastien BULLY, Anaïs DELLISTE, Sabine LEFEBVRE, Cyprien MUREAU. 2021b. Les sites ecclésiastiques et monastiques de l'archipel du Kvarner (Croatie), campagne 2019: Martinšćica (île de Cres). *Bulletin archéologique des Écoles françaises à l'étranger [En ligne], Balkans*, DOI: <https://doi.org/10.4000/baefe.1971> (retrieved 21 September 2022).
- ČUČKOVIĆ, Zoran. 2017. Claiming the sea: Bronze Age fortified sites of the North-Eastern Adriatic Sea (Cres and Lošinj Islands, Croatia). *World Archaeology* 49-4: 526-546.
- DEMICHELI, Dino (ed.) 2017. *Illyrica antiqua II. In honorem Duje Rendić-Miočević. Proceedings of the international conference, Šibenik, 12th–15th September 2013*. Zagreb: Department of Archaeology, Faculty of Humanities and Social Sciences.
- DOMIĆ KUNIĆ, Alka. 2021. Izvori za lokaciju Stridona, Jeronimova rodnog mjesta. In *Sveti Jeronim kroz vjekove. Kult i spomenici / Saint Jerome Through the Ages. Cult and Monuments*, eds. Emilio Marin, Katarina Horvat-Levaj, 43-77. Zagreb: Hrvatsko katoličko sveučilište, Institut za povijest umjetnosti.
- DŽINO, Danijel. 2010. *Becoming Slav, Becoming Croat. Identity Transformations in Post-Roman and Early Medieval Dalmatia* [East Central and Eastern Europe in the Middle Ages, 450-1450, 12]. Boston-Leiden: Brill.
- DŽINO, Danijel. 2017. Post-Roman Dalmatia. Collapse and regeneration of a complex social system. In *Imperial Spheres and the Adriatic. Byzantium, the Carolingians and the Treaty of Aachen (812)*, eds. Mladen Ančić, Jonathan Shepard, Trpimir Vedriš, 155-173. London-New York: Routledge.
- FABER, Aleksandra. 1963-65. Antički bedemi grada Krka. *Vjesnik za arheologiju i historiju dalmatinsku* 65: 45-54.
- FABER, Aleksandra. 1986/1987. Osvrt na neka utvrđenja otoka Krka od vremena prehistoprije do antike i srednjeg vijeka. *Prilozi Instituta za arheologiju u Zagrebu* 3/4: 113-140.
- GAFFNEY Vince, Nikša VUJNOVIĆ, John W. HAYES, Timothy KAISER, Stašo FORENBAHER. 2017. In praise of limestone and Dr Branko Kirigin: landscape and landscape archaeology on the Dalmatian Islands. *Vjesnik za arheologiju i historiju dalmatinsku* 110-2: 601-613.

- GLAVAŠ, Vedrana. 2014. Analize vidljivosti u prapovijesnom krajoliku Velebita/Viewshed analyses in the prehistoric Velebit landscape. *Archaeologia Adriatica* VIII: 1-26.
- GLAVAŠ, Vedrana. 2018. The legends of rock: stories, landscape, and boundaries in the central velebit mountain. In *Landscape in Southeastern Europe. Studies on South East Europe*, eds. Lena Mirošević, Gregory Zaro, Mario Katić, Danijela Birt, 15-33. Münster: LIT Verlag.
- GLAVAŠ, Vedrana, Miroslav GLAVIČIĆ. 2017. Naseljenost sjevernog i srednjeg Velebita u prapovijesti i antici. *Senjski zbornik* 44: 117-128.
- GLAVAŠ, Vedrana, Miroslav GLAVIČIĆ. 2019. Transformation of prehistoric to historic landscape: the example of *civitas Lopsica*. *Senjski zbornik* 46: 119-136.
- GLAVIČIĆ, Miroslav. 2009. Magistrati i uglednici Arbe. *Senjski zbornik* 36: 57-66.
- GLICKSMAN, Kristina. 2005. Internal and external trade in the Roman province of Dalmatia *Opuscula archaeologica* 29: 189-230.
- GLICKSMAN, Kristina. 2018. Metal mining in Roman Dalmatia. *Opuscula archaeologica* 39/40: 261-283.
- GOLDSTEIN, Ivo. 1992. *Bizant na Jadranu* [Latina et Graeca]. Zagreb: Zavod za hrvatsku povijest Filozofskog fakulteta.
- GOLDSTEIN, Ivo. 2005. Funkcija Jadrana u ratu Bizantskog carstva protiv Ostrogota 535.-555. *Radovi - Zavod za hrvatsku povijest* 37: 23-34.
- GRAČANIN, Hrvoje. 2015a. Late Antique Dalmatia and Pannonia in Cassiodorus' *Variae*. *Povijesni prilozi* 49: 9-83.
- GRAČANIN, Hrvoje. 2015b. The history of the eastern Adriatic region from the Vth to the VIIIth centuries AD: historical processes and historiographic problems. In *AdriaAtlas et l'histoire de l'espace adriatique du VIe s. a.C. au VIIIe s. p.C. Actes du colloque international de Rome (4-6 novembre 2013)* [Scripta Antiqua 79], eds. Yolande Marion, Francis Tassaux, 67-97. Bordeaux: Ausonius Éditions.
- GRAČANIN, Hrvoje. 2019. A New Contextualization of an Old Source – Cassiodorus' *Variae* on Late Antique Istria. *Miscellanea Hadriatica et Mediterranea* 6: 9-34.
- GRAČANIN, Hrvoje, Nebojša KARTALIJA. 2018. Neka razmatranja o gospodarstvu Zapadnog Ilirika od IV do VI stoljeća. *Acta Illyrica. Godišnjak Udruženja BATHINVS* II-2: 335-394.
- GREY, Cam. 2016. Landowning and Labour in the Rural Economy. In *A Companion to Ostrogothic Italy*, eds. Jonathan J. Arnold, M. Shane Bjornlie, Kristina Sessa, 263-295. Leiden - Boston: Brill.
- GRISONIC, Maja. 2017. Amphorae from Caska in the Augusto-Tiberian period: imports and local productions? In *Adriamphorae. Amfore kao izvor za rekonstrukciju gospodarskoga razvoja jadranske regije u antici: lokalna proizvodnja. Radovi s okruglog stola, Zagreb, 21. travnja 2016. g. / Adriamphorae. Amphorae as a resource for the reconstruction of economic development in the Adriatic region in Antiquity: local production, Proceedings of the workshop, Zagreb, 21st April 2016*, eds. Goranka Lipovac Vrkljan, Irena Radić Rossi, Ana Konestra, 68-79. Zagreb: Institut za arheologiju.

- GRISONIC, Maja. 2022. Salt Exploitation in Roman Histria and Dalmatia: An Introduction to the Archaeological Research. *Journal of Maritime Archaeology* 17: 161-190.
- GRISONIC Maja, Nikolina STEPAN. 2022. Amphorae and tiles from the island of Pag: indirect evidence of the exploitation of local resources in the early Roman imperial period. In LIPOVAC VRKLJAN, KONESTRA I ETEROVIĆ BORZIĆ 2022: 77-93.
- GWIRTZMAN, Kristina, Linda BEDANJEC, Katarina MUŽAR. 2019. *Primoštenska gumna u prošlosti i sadašnjosti*. Sv. Križ Začretje: Udruga Arx Novum.
- ILKIĆ, Mate. 2018. Numismatic finds from the area of the workshop of Sextus Metilius Maximus in Crikvenica. In LIPOVAC VRKLJAN, KONESTRA 2018: 44-49.
- JANEŠ, Andrej. 2015. Late Antique Rural Complex by the Church of St. Chrysogonus in Glavotok (Island of Krk). *Portal. Godišnjak Hrvatskog restauratorskog zavoda* 6: 9-22.
- JELINČIĆ, Kristina. 2005. *Topografija rustičnih vila na otoku Braču*. Unpublished MA thesis. University of Zagreb, Zagreb.
- JURKOVIĆ, Miljenko. 2019, The transformation of Adriatic Islands from Antiquity to the Early Middle Ages. In *Change and Resilience. The Occupation of Mediterranean Islands in Late Antiquity* [Jurkowski Institute Publications 9], eds. Miguel Ángel Cau Ontiveros, Catalina Mas Florit, 111-137. Oxford: Oxbow Books.
- JURKOVIĆ, Miljenko, Tin TURKOVIĆ. 2019. Kaštelina – vila obitelji Bebija. *Ars Adriatica* 9: 7-20.
- KEHOE, Dennis P. 2007. *Law and the Rural Economy in the Roman Empire*. Ann Arbor: University of Michigan Press.
- KNODELL Alex R., Toby C. WILKINSON, Thomas P. LEPPARD, Hector A. ORENGO. 2022. Survey Archaeology in the Mediterranean World: Regional Traditions and Contributions to Long-Term History. *Journal of Archaeological Research* (<https://doi.org/10.1007/s10814-022-09175-7>) (retrieved 18 September 2022).
- KONESTRA, Ana. 2015. Ricerche nei musei della Liburnia settentrionale (Quarnero, Croazia): potenzialità, nuove attestazioni e aggiornamenti sulla diffusione di alcune tipologie ceramiche. *Quaderni Friulani di Archeologia* XXV: 117-122.
- KONESTRA, Ana, Nera ŠEGVIĆ, Paula ANDROIĆ GRAČANIN, Ranko STARAC. 2017. Arheološka topografija otoka Raba: geofizička, sondažna i topografska istraživanja u 2016. godini. *Annales Instituti Archaeologici* XIII: 103-110.
- KONESTRA, Ana, Fabian WELC, Paula ANDROIĆ GRAČANIN, Kamil RABIEGA, Bartosz NOWACKI, Agnese KUKELA. 2020. Tipologija i organizacija otočnih naselja Raba kroz dijakronijski pristup – Prvi podaci multidisciplinarnih istraživanja. *Annales Instituti Archaeologici* XVI: 229-244.
- KONESTRA, Ana, Nenad CAMBI. 2020-2021. Rapska osteoteka: novi pogled na sepulkralni spomenik Remije Maksime iz franjevačkog samostana u Kamporu na otoku Rabu. *Vjesnik za arheologiju i historiju dalmatinsku* 113-2: 357-382.
- KONESTRA, Ana, Paula ANDROIĆ GRAČANIN, Fabian WELC. 2021. Burialscapes of Rab Island (North East Adriatic): The Role of Sepulchral Evidence in the Reconstruction of Roman and Late Antique Rural Settlement Pattern. *Annales. Series Historia et Sociologia*, 31-3: 391-412.

- KONESTRA Ana, Goranka LIPOVAC VRKLJAN, Fabian WELC. 2022. Distribution possibilities and transport infrastructure in northern Dalmatia's pottery workshops: evidence and interpretations. In LIPOVAC VRKLJAN, KONESTRA I ETEROVIĆ BORZIĆ 2022: 21-35.
- KONESTRA Ana, Fabian WELC, Paula ANDROIĆ GRAČANIN, Władysław WEKER 2022. An insight into craft activities in rural areas of Dalmatia province - first data on iron working at the Roman settlement in Lopar (Island of Rab). In *7th International Conference on Mediaeval Archaeology - Secrets of iron - from raw material to an iron object*, eds. Tajana Sekelj Ivančan, Tena Karavidović, Tatjana Tkalčec, Siniša Krznar, Juraj Belaj, 2022. Zagreb: Institut za arheologiju.
- KOPAČKOVA, Jana. 2020. Local Production of Olive Oil and Wine in Roman Dalmatia (1 st -7 th Century AD). *Arheološki radovi i rasprave* 19: 163-184.
- KOS, Peter. 2014. Izgradnja zapornega sistema *Claustra Alpium Iuliarum*. Zgodovinski, arheološki in numizmatični viri. In KUSETIČ 2014b: 112-132.
- KURILIĆ, Anamarija. 1994. Latinski natpisi antičkog, kasnoantičkog i ranosrednjovjekovnog razdoblja na otoku Pagu i zadarsko-sibenskom otočju. *Radovi Zavoda za povijesne znanosti HAZU u Zadru* 36: 191-246.
- KURILIĆ, Anamarija. 2004. *Epigrafski spomenici na prostoru Novalje / Epigraphic Monuments in the Area of Novalja*. Novalja – Zadar: Grad Novalja, Arheološki muzej Zadar, Sveučilište u Zadru, Odjel za povijest.
- KURILIĆ, Anamarija. 2011. Kasnoantički stambeni objekt iz Caske (Cissa) na otoku Pagu. *Histria antiqua* 20: 405-413.
- KURILIĆ, Anamarija. 2022. Landscape transformations in Roman Dalmatia. *Mélanges de l'École française de Rome - Antiquité* 134-1: 89-101.
- KURILIĆ, Anamarija, Ivo OŠTARIĆ. 2013. Arheološka karta otoka Paga. Novalja: Matica Hrvatska.
- KURILIĆ, Anamarija, Zrinka SERVENTI. 2014 (2015). The inscription of Gaius Cornelius from Ilovik and the Cornelii in Liburnia. *Opuscula Archaeologica* 37/38: 219-247.
- KURILIĆ, Anamarija, Zrinka SERVENTI. 2015. Buried far Away: Easterners in Roman Liburnia. In *Places of Memory: Cemeteries and Funerary Practices throughout the Time* [Annales Universitatis Apulensis 19/II], eds. Daniel Dumitran, Marius Rotar, 13-36. Cluj-Napoca: Editura Mega
- KURILIĆ, Anamarija, Zrinka SERVENTI. 2016. Mosaic Inscriptions in the Basilica of Sv. Nikola (St. Nicolas) on the island of Krk, *Acta XVI congressus internationalis archaeologiae christianae Romae (22. -28. 09. 2013), Roma, 2016* [Studi di antichità cristiana 66], eds. Olof Brandt, Vincenzo Fiocchi Nicolai, Gabriele Castiglia, 2281-2306. Citta del Vaticano: Pontificio Istituto di Archeologia Cristiana.
- KURILIĆ, Anamarija, Zrinka SERVENTI. 2018a. The Caska Necropolis – Exceptions, Rituals and “Deathscapes”. In *Antropologia e archeologia a confronto. Archeologia e antropologia della morte. 2. Corpi, relazioni e azioni: il paesaggio del rito Atti dell'Incontro Internazionale di studi Roma, École française – Stadio di Domiziano, 20-22 maggio 2015*, ed. Valenitno Nizzo, 765-777. Roma: E.S.S. Editorial Service System Srl.

- KURILIĆ, Anamarija, Zrinka SERVENTI. 2018b. Late Roman Tombs and Burial Places in the Province of Dalmatia. *The Basilica of St Sophia During the Transition from Paganism to Christianity. International scientific conference, Sofia, March 11–13, 2014*, Vol. VII, 450-468. Serdica – Sredets – Sofia.
- KUSETIČ, Jure. 2014a. *Claustra Alpium Iuliarum* – topografski in arheološki pregled. In KUSETIČ (ed.) 2014b: 27-111.
- KUSETIČ, Jure (ed.). 2014b. *Claustra Alpium Iuliarum — med raziskovanjem in upravljanjem / Claustra Alpium Iuliarum — Between Research and Management*, ed. Jure Kusetič. Ljubljana: Inštitut Ivan Michler, zavod za zgodovino prostora.
- LAZINICA, Bojan, Dražen MARŠIĆ. 2017. Following the Trail of the New Liburnian Cippus from Rab. Arba– New Production Center of Liburnian Cippi. In DEMICHELI 2017: 187-199.
- LEWIT, Tamara. 2003. ‘Vanishing Villas’: What happened to elite rural habitation in the West in the 5th and 6th centuries A.D.? *Journal of Roman Archaeology* 16: 260-275.
- LIPOVAC, Goranka. 1991. Razmatranje o problemima antičkog bedema grada Krka - povodom novih nalaza. *Prilozi Instituta za arheologiju u Zagrebu* 8: 37-46.
- LIPOVAC VRKLJAN, Goranka, Bartul ŠILJEG. 2012. Prilog antičkoj topografiji otoka Raba – rimska keramičarska peć na Loparu. *Senjski zbornik* 39: 5-33.
- LIPOVAC VRKLJAN, Goranka, Bartul ŠILJEG, Ivana OŽANIĆ ROGULJIĆ, Ana KONESTRA, Iva KOSTEŠIĆ, Nera ŠEGVIĆ. 2014. Projekt Arheološka topografija otoka Raba: rezultati terenskog pregleda poluotoka Lopara u 2013. godini. *Annales Instituti Archaeologici* X: 202-208.
- LIPOVAC VRKLJAN, Goranka, Ana KONESTRA, Irena RADIĆ ROSSI. 2016. Rezultati aktivnosti projekta “Arheološka topografija otoka Raba” u 2015. g.: terenski pregledi, obrada arheološke građe, popularizacija znanosti. *Annales Instituti Archaeologici* XII: 201-205.
- LIPOVAC VRKLJAN, Goranka, Ana KONESTRA, Nera ŠEGVIĆ. 2017. Felix Arba – reconstructing urban and rural economic capacities through GIS. In *Mapping urban changes / Mapiranje urbanih promjena*, ed. Ana Plosnić Škarić, 314-335. Zagreb: Institut za povijest umjetnosti.
- LIPOVAC VRKLJAN, Goranka, Ana KONESTRA. 2018a. Approaching the Roman economy of Province Dalmatia through pottery production – the Liburnia case study. In LIPOVAC VRKLJAN, KONESTRA 2018b: 14-36.
- LIPOVAC VRKLJAN, Goranka, Ana KONESTRA (ed.). 2018b. *Pottery, landscapes and economy of Roman Dalmatia. Interdisciplinary approaches*. Oxford: Archaeopress.
- LIPOVAC VRKLJAN, Goranka, Ranko STARAC, Ana KONESTRA forthcoming. Continuity of use of the landscape of the Vinodol valley (northern Liburnia, NE Adriatic): communications, settlements and surveillance points from Prehistory to Late Antiquity and the early Middle Ages. In *TRADE - Transformations of Adriatic Europe (2nd-9th century). Proceedings of the conference, Zadar, 11th-13th February 2016*, eds. Igor Borzić, Enrico Cirelli, Kristina Jelinčić Vučković, Ana Konestra, Ivana Ožanić Roguljić, forthcoming. Oxford: Archaeopress.

- LIPOVAC VRKLJAN, Goranka, Ana KONESTRA, Anamarija ETEROVIĆ BORZIĆ (eds.). 2022. *Roman Pottery and Glass Manufactures. Production and Trade in the Adriatic region and beyond. Proceedings of the 4th International Archaeological Colloquium (Crikvenica, 8-9 November 2017)*. Oxford: Archaeopress.
- MARANO, Yuri A. 2016. Gli ambienti absidati nell'architettura residenziale dell'Italia settentrionale tardoantica. In *L'alimentazione nell'Antichità. Atti della XLVI settimana di studi aquileiesi, Aquileia, Sala del Consiglio Comunale (14-16 maggio 2015)* [Antichità altoadriatiche, LXXXIV], ed. Giuseppe Cuscito, 111-130. Trieste: Editreg.
- MARCHESETTI, Carlo. 1903. I castellieri preistorici di Trieste e della regione Giulia. *Atti del Museo Civico di Storia Naturale di Trieste* 4: 1-206.
- MAROHNIĆ, Jelena. 2014. Ulomak rimskog nadgrobnog spomenika iz Baške. *Krčki zbornik* 70: 15-20.
- MARZANO, Annalisa. 2018. Maritime Villas and the Resources of the Sea. In MARZANO I MÉTRAUX 2018: 125-140.
- MARZANO, Annalisa. 2021. Figures in an Imperial Landscape: Ecological and Societal Factors on Settlement Patterns and Agriculture in Roman Italy. In *Climate Change and Ancient Societies in Europe and the Near East. Diversity in Collapse and Resilience* [Palgrave Studies in Ancient Economies], eds. Paul Erdkamp, Joseph G. Manning, Koenraad Verbove, 505-531. Cham: Palgrave Macmillan.
- MARZANO, Annalisa, Guy P. R. MÉTRAUX (eds.). 2018. *The Roman Villa in the Mediterranean Basin. Late Republic to Late Antiquity*. Cambridge: Cambridge University Press.
- MATIJAŠIĆ, Robert. 1988. Kasiodorova pisma kao izvor za poznavanje kasnoantičke povijesti Istre (Cass. Var. XII, 22, 23, 24). *Zgodovinski časopis* 42-3: 363-371.
- MATIJAŠIĆ, Robert. 1995. Nomenclatura oeconomica antičke Istre. Nazivi poljodjelskih zanimanja i dužnosti u antičkoj Istri. *Arheološki radovi i rasprave* 12: 171-188.
- MATIJAŠIĆ, Robert. 1998. *Gospodarstvo antičke Istre. Arheološki ostaci kao izvor za poznavanje društveno-gospodarskih odnosa u Istri u antici (I. st. pr. Kr. - III. st. posl. Kr.)* [Povijest Istre, knjiga 4]. Pula: Žakan Juri.
- MATIJAŠIĆ, Robert. 2007. O nalazu kasnoantičkih tijesaka u Poreču 1997. godine. *Opuscula archaeologica* 31: 265-281.
- MATIJAŠIĆ, Robert. 2012. *Povijest hrvatskih zemalja u kasnoj antici od Dioklecijana do Justiniana*. Zagreb: Leykam International.
- MATTINGLY, David J., Robert E. WITCHER. 2004. Mapping the Roman World: The Contribution of Field Survey Data. In *Side-by-Side Survey. Comparative Regional Studies in the Mediterranean World*, eds. Susanne E. Alcock, John Cherry, 173-186. Oxford: Oxbow.
- MEDINI, Julian. 1980. Provincia Liburnia. *Diadora* 9: 363-434.
- MIGOTTI, Branka. 1994/95. Vrste i namjene ranokršćanskih zdanja u Dalmaciji. *Radovi FFZd* 34 (21): 113-144.
- MILIVOJEVIĆ, Feđa. 2021. *Cesarov Ilirik*. Zagreb-Rijeka: Hrvatski institut za povijest, Filozofski fakultet u Rijeci.

- MILOTIĆ, Ivan. 2019. Arbitraža o razgraničenju između Aserije i Alverije. *Zbornik radova Pravnog fakulteta u Splitu* 56-4: 905-922.
- MUNRO, Beth. 2012. Recycling, demand for materials, and landownership at villas in Italy and the western provinces in late antiquity. *Journal of Roman Archaeology* 25: 351-370.
- NOVAK, Andrej. 2007. *L'Istria nella prima età bizantina* [Collana degli Atti n. 27]. Rovinj: Centro di ricerche storiche - Rovigno.
- NOWACKI, Bartosz, Ana KONESTRA, Fabian WELC 2022. Preliminary typology and contextual analysis of Roman and late antique cooking wares from the Roman rural settlement at Podšilo bay on the island of Rab (north – eastern Adriatic, Croatia). *Annales Instituti Archaeologici XVIII*: 88-119.
- OŽANIĆ ROGULJIĆ, Ivana. 2011. Terra sigillata i keramika tankih stijenki s lokaliteta-Crikvenica – „Igralište”. In *Rimske keramičarske i staklarske radionice, proizvodnja i trgovina na jadranskom prostoru. Zbornik I međunarodnog arheološkog kolokvija, Crikvenica, 23.-24. listopada 2008.*, eds. Goranka Lipovac Vrkljan, Bartul Šiljeg, Irena Radić Rossi, 31-38. Crikvenica-Zagreb: Muzej Grada Crikvenice, Institut za arheologiju.
- OŽANIĆ ROGULJIĆ, Ivana. 2019. Osvrt na tekstilnu proizvodnju u rimskodobnoj Dalmaciji. *Izdanja HAD-a* 33: 39-45.
- OŽANIĆ ROGULJIĆ, Ivana, Ana KONESTRA. 2016. Illuminating the Way: Later Roman Factory Lamp from a Grave Context in Crikvenica. In *Roman and Late Antique Lamps: Production and Distribution, Contacts on the Mediterranean. Proceedings of the international round table, Zagreb 2nd February 2015*, eds. Goranka Lipovac Vrkljan, Ivana Ožanić Roguljić, Marina Ugarković, 128-136. Zagreb: Institute of archaeology.
- PIETRUSZKA Wojciech, Igor WYPIJEWSKI. 2016. Sextus Mutillius Maximus: In Search of the Owner of a Liburnian “saltus”. *Zeitschrift für Papyrologie und Epigraphik* 198: 283-286.
- RADIĆ ROSSI, Irena. 2017. The study of sea-level changes at coastal archaeological sites. *Vjesnik za arheologiju i historiju dalmatinsku* 110-2: 549-576.
- RADIĆ ROSSI, Irena, Giulia BOETTO. 2020. The Roman Scuttled Ships and Harbour Structures of Caska, Pag Island, Croatia in their Cultural and Historical Context. *International Journal of Nautical Archaeology* 49-2: 263-290.
- RENDIĆ-MIOČEVIĆ, Ante. 2004. Ulomak antičkog sarkofaga iz Baške. *Vjesnik Arheološkog muzeja u Zagrebu* 3.s., XXXVII: 191-203.
- ROTHE, Ursula. 2018. The Roman Villa: Definitions and Variations. In MARZANO I MÉTRAUX 2018: 42-58.
- SANADER, Mirjana. 2006. O antičkoj provincijalnoj arheologiji u Hrvatskoj s naglaskom na gospodarstvo. *Opuscula Archaeologica* 30 (2008): 143-182.
- SCHRUNK, Ivančica, Vlasta BEGOVIĆ, Marina UGARKOVIĆ, Ana KONESTRA. 2022. Otočna arheologija i maritimna vila: Soline na sv. Klementu od 2007. do danas. *Izdanja HAD-a* 24: 177-202.
- SERVENTI, Zrinka. 2012. Važnost otoka Ilovika i Sv. Petra za plovdbenu rutu duž istočne obale Jadrana u svjetlu novijih istraživanja. *Histria antiqua* 21: 401-412.

- SFAMENI, Carla. 2012. Ville "residenziali" in Italia nel V secolo: considerazioni su dati recenti. In *Gli allievi raccontano, Atti dell'incontro di studio per i trent'anni della Scuola di Specializzazione in Beni Archeologici Università del Salento, Cavallino (LE)- Convento dei Domenicani 29-30 gennaio 2010* [Archeologia e storia 10.1], eds. Rino D'Andria, Katia Mannino, 53-64. Galatina: Congedo editore.
- SKELAC, Goran. 2006. Lokalitet: Caska – gospodarski kompleks. *Hrvatski arheološki godišnjak* 2/2005: 281-283.
- SKELAC, Goran. 2007. Lokalitet: Caska – gospodarski kompleks. *Hrvatski arheološki godišnjak* 3/2006: 315-316.
- STARAC, Alka. 2000. *Rimsko vladanje u Istriji i Liburniji II. Liburnija* [Monografije i katalogi 10/II]. Pula: Arheološki muzej Istre.
- STARAC, Ranko. 2000. Two Examples of Rural Ecclesiastical Architectural Continuity on the Island of Krk. *Hortus Artium Medievalium* 10: 231-236.
- STARAC, Ranko. 2002. Arheološka baština Jadranova. *Vinodolski zbornik* 8: 189-206.
- STARAC, Ranko. 2004. Two Examples of Rural Ecclesiastical Architectural Continuity on the Island of Krk. *Hortus Artium Medievalium* 10: 231-236.
- STARAC, Ranko. 2019. *Opatija i crkva svete Lucije u Jurandvoru*. Baška: Općina Baška.
- STARAC, Ranko. 2021. La basilica in località "Mire" a Baška sull'isola di Krk (Veglia). In BRADANOVIĆ, JURKOVIĆ 2021: 163-171.
- STARAC, Ranko. 2022. Examples of ceramic building materials of Roman and late antique date from Cickini near Malinska on the island of Krk (NE Adriatic, Croatia). In LIPOVAC VRKLJAN, KONESTRA I ETEROVIĆ BORZIĆ 2022: 140-148.
- SUIĆ, Mate. 1955. Granice Liburnije kroz stoljeća. *Radovi instituta JAZU u Zadru* 2: 273-290.
- SUIĆ, Mate. 1957. Arheološka istraživanja u Mulinama na otoku Ugljanu. *Ljetopis JAZU* 64: 230-249.
- SUIĆ, Mate. 1986. Hijeronim Stridonjanin - građanin Tarsatike. *Rad JAZU. Razred za društvene znanosti XXIV*: 213-278.
- SUIĆ, Mate. 1996. Odnos grad-selo u antici na is-točnoj jadranskoj obali. In *Odabrani radovi iz stare povijesti hrvatske – opera selecta*, ed. Nenad Cambi, 427-454. Zadar: Matica hrvatska, Arheološki muzej Zadar.
- SUIĆ, Mate. 2003. *Antički grad na istočnom Jadranu*. Zagreb: Institut za arheologiju, Golden marketing - tehnička knjiga.
- ŠAŠEL, Jaroslav. 1970 (1992). Alpes Iuliana. In *Opera selecta* [Situla, Razprave Narodnega muzeja v Ljubljani, br. 30], 728-739. Ljubljana: Narodni muzej.
- ŠKEGRO, Ante. 1999. *Gospodarstvo rimske provincije Dalmacije*. Zagreb: Sveučilište u Zagrebu – Hrvatski studiji.
- TOL, Gijs W. 2012, Introduction. In *A fragmented history. A methodological and artefactual approach to the study of ancient settlement in the territories of Satricum and Antium* [Groningen Archaeological Studies 16], ed. Gijs Willem Tol, xii-xvi. Groningen: Barkhuis Publishing/University of Groningen Library.

- TOMIČIĆ, Željko. 1987. Novija ranosrednjovjekovna istraživanja Odjela za arheologiju. *Prilozi Instituta za arheologiju u Zagrebu* 3/4: 141-173
- TURKOVIĆ, Tin, Maja ZEMAN. 2011. Prilog poznavanju kasnoantičkih vila s područja provincije Dalmacije – slučaj vile u Strupniću kraj Livna. *Ars Adriatica* 1: 9-26.
- TURKOVIĆ, Tin, Nikolina MARAKOVIĆ. 2012. Transformation of rural landscape in the southern part of the province of Dalmatia: Polače, Ostrvica, Mogorjelo. In *Arqueología de un Paisaje en Transición. Antigüedad Tardía y Alta Edad Media*, eds. Pilar Diarte Blasco, Alejandro Martín López, 61-63. Zaragoza: Servicio de Publicaciones de la Universidad de Zaragoza.
- TURKOVIĆ, Tin, Ivan BASIĆ. 2013. Kasnoantička i ranosrednjovjekovna Tarsatička Liburnija (Liburnia Tarsaticensis) u svjetlu geografskih izvora. *Starohrvatska prosvjeta* s.III 40: 33-80.
- UGARKOVIĆ, Marina, Ranko STARAC. 2022. One man's trash is another man's treasure. Household waste deposit from Porta Pisana and trends of fine ware consumption within the settlement of Krk (in the last centuries BCE). In LIPOVAC VRKLJAN, KONESTRA I ETEROVIĆ BORZIĆ 2022: 254-284.
- UGLEŠIĆ, Ante. 2017. Podvršje – Glavčine: Results of the most Recent Research. *Hortus Artium Medievalium* 23: 653-665.
- VIŠNJIĆ, Josip. 2019a. The South Sector of the Claustra Alpium Iuliarum Defensive System. Introductory Consideration. In VIŠNJIĆ, ZANIER 2019: 38-67.
- VIŠNJIĆ, Josip. 2019b. Roman Tarsatica as Part of the Claustra Alpium Iuliarum System. The Results of Recent Archeological Investigation. In VIŠNJIĆ, ZANIER 2019: 68-99.
- VIŠNJIĆ, Josip, Katarina ZANIER (eds.). 2019. *Claustra patefacta sunt Alpium Iuliarum. Recent Archeological Investigation of the Late Roman Barrier System*. Zagreb: Hrvatski restauratorski zavod.
- VITELLI CASELLA, Mattia. 2021. *La Liburnia settentrionale nell'antichità: geografia, istituzioni e società*. Bologna: Pàtron Editore.
- VODIČKA MIHOLJEK, Kristina. 2015. Arheološki lokalitet Poje - antička vila u Njivicama na otoku Krku. *Izdanja HAD-a* 30: 57-66.
- von REDEN, Sitta, Barbara KOWALZIG. 2022. New Institutional Economics, Economic Growth and Institutional Change. In *The Cambridge Companion to the Ancient Greek Economy*, ed. Sitta von Reden, 347-359. Cambridge: Cambridge University Press.
- WELC, Fabian. 2018. Geoarchaeology of pottery workshop sites in Roman *Dalmatia*. In LIPOVAC VRKLJAN, KONESTRA 2018: 62-70.
- WELC, Fabian, Radosław MIESZKOWSKI, Goranka LIPOVAC VRKLJAN, Ana KONESTRA. 2017. An attempt to integration of different geophysical methods (magnetic, GPR and ERT); a case study from the late Roman settlement on the Island of Rab in Croatia. *Studia Quaternaria* 34-1: 47-59.
- WELC, Fabian, Ana KONESTRA, Anita DUGONJIĆ, Paula ANDROIĆ GRAČANIN, Kamil RABIEGA, Bartosz NOWACKI. 2019. Multidisciplinary insight into late Roman rural settlement on the northeastern Adriatic coast of Croatia: Island of Rab case study. *Polish Archaeology in the Mediterranean*, 28-2: 481-508.

- WELC, Fabian, Ana KONESTRA forthcoming. Applying ground penetrating radar to track architectural transformations: the case of the Monastery st. Peter on the Island of Rab. *Studia Quaternaria*, forthcoming.
- WICKHAM, Chris. 2005. *Framing the Early Middle Ages: Europe and the Mediterranean, 400-800*. Oxford: Oxford University Press.
- WILKES, John J. 1969. *Dalmatia*. Cambridge: Harvard University Press.
- ZAMBONI, Lorenzo. 2022. Indagare il rurale. Prospettive per un'archeologia delle campagne e dei contadini in epoca romana. In *Edifici rustici romani tra pianura e Appennino. Stato della ricerca*, eds. Stefano Maggi, Manuela Battaglia, Lorenzo Zamboni, 227-232. Firenze: All'Insegna del Giglio.
- ZELIĆ, Danko. 1993. Nastanak urbanih naselja na otoku Krku. *Radovi Instituta za povijest umjetnosti* 17-2: 7-17.
- ZANINI, Enrico. 2016. I luoghi di sosta: funzioni, spazi, contesti. *Antiquité tardive* 24: 81-90.
- ZANINOVIĆ, Marin. 1985. Prata legionis u Kosovom polju kraj Knina s osvrtom na teritorij Tilurija. *Opuscvla archaeologica* 10: 63-79.
- ZANINOVIĆ, Marin. 1987. Rimska villa rustica na Kupinoviku kraj Dola. *Prilozi povijesti otoka Hvara* 1: 91-96.
- ZEMAN, Maja. 2014. Problemski pristup istraživanju razvoja i transformacija rimskih »vila«. *Peristil* 57: 35-45.
- ZGRABLIĆ, Marina, Davor BULIĆ. 2017. Povijesno-topografski aspekti kristijanizacije agerakolonije Pole u kasnoj antici i ranom srednjem vijeku (4. – 6. stoljeće). *Radovi - Zavod za hrvatsku povijest* 49: 35-77.

Ruralni krajolici rimske (sjeverne) Liburnije: dijakronijski razvoj organizacije i gospodarstva u izvangradskim područjima u svjetlu novijih arheoloških istraživanja

Pristupajući sjeverozapadnom dijelu provincije Dalmacije, odnosno sjevernoj Liburniji, kroz suvremene metode interpretacije (rimskih) krajolika, u radu se raspravlja o formiranju, organizaciji i evoluciji izvangradskih naselja i njihovoj ekonomiji. U tu su svrhu prikupljeni podaci recentnih istraživanja provedenih na obalnome i otočnome dijelu Kvarnera, Hrvatskoga i podvelebitskog primorja. Kako bi se razumjele promjene, odnosno kontinuitet naseljavanja izvangradskih područja, rasprava započinje pregledom dostupnih podataka za predrimsku organizaciju ruralnih krajolika. Potom se, na temelju još uvijek sporadičnih i ograničenih podataka, raspravlja o formiranju rimskoga tzv. krajolika vila, o pojedincima, odnosno društvenim grupama te o gospodarskim aktivnostima koje je moguće povezati uz te, mahom novonastale, lokalitete.

Detektirajući društveno-političke promjene koje su zahvatile širu jadransku regiju i specifično sjevernu Liburniju u 3., a moguće već i u 2. stoljeću, u radu se raspravlja o mogućim primjerima prvoga „vala“ transformacija ruralnih krajolika, posebno u smislu snažnih promjena gospodarskih aktivnosti, ali moguće i strukturnih značajki ruralnih sklopova.

Daljnji razvoj i evoluciju ruralnih i izvangradskih prostora sjeverne Liburnije nešto je lakše pratiti zahvaljujući dosadašnjem velikom interesu istraživača za crkvena zdanja koja su postupno počela dominirati krajolikom od 5. st. nadalje. Sagledavajući njihov položaj u odnosu na ranije lokalitete te njihove karakteristike i pojedine nalaze, predlaže se interpretacija o značenju kapilarne kristijanizacije izvangradskih prostora u kontekstu društvenih odnosa i praksi kasnoantičkoga razdoblja. S druge strane, još uvijek rijetki podaci o transformacijama ruralnih rezidencijalno-proizvodnih sklopova omogućavaju detektiranje pojedinih procesa, poput reupotrebe i recikliranja, te njihovu interpretaciju kroz prizmu gospodarstva i mogućeg nastajanja novih oblika naseljavanja.

Iako su u radu analizirani podaci još uvijek nedostadni, posebno iz aspekta materijalne kulture, a uzorak lokaliteta daleko je od zadovoljavajućega, dijakronijsko sagledavanje razvoja i transformacija ruralnoga krajolika sjeverne Liburnije omogućeno je analizom koja uzima u obzir različite pokazatelje i izvore te analogije iz okolnih područja. Buduća stratigrafska istraživanja ruralnih lokaliteta i paralelna analiza materijalne kulture, posebno njihova dosljedna objava, zasigurno će pomoći u razrješenju brojnih, ovdje tek naznačenih i još uvijek otvorenih pitanja te omogućiti stvaranje robusnijeg modela razvoja rimskih ruralnih krajolika sjeverne Liburnije.

Ključne riječi: rimski ruralni krajolici, provincija Dalmacija, sjeverna Liburnija, rimska vila, kasna antika

Keywords: Roman rural landscape, province of Dalmatia, northern Liburnia, Roman villa, late antiquity

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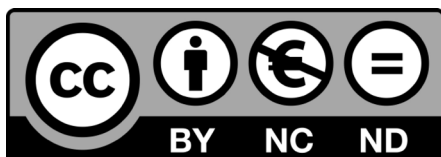
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