

# Arhitektura i arhitektonska plastika burga Vrbovca kraj Huma na Sutli

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**Horvat, Zorislav; Tkalčec, Tatjana**

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# Arhitektura i arhitektonska plastika burga Vrbovca kraj Huma na Sutli

## *Architecture and Architectural Stonework of the Mediaeval Castle of Vrbovec near Hum na Sutli*

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ZORISLAV HORVAT  
Zagrebačka 17  
HR-10340 Vrbovec

TATJANA TKALČEC  
Institut za arheologiju  
Ulica grada Vukovara 68  
HR-10000 Zagreb  
tatjana.tkalcec@iarh.hr

*U radu je prikazan burg Vrbovec, smješten na krajnjem zapadu Hrvatskoga zagorja. Nakon iznošenja pregleda opisa i položaja burga, osnovnih povijesnih podataka i rezultata arheoloških istraživanja, arhitektura burga se razmatra i u širem kontekstu. Naziru se tri faze gradnje. Prvu fazu svjedoči sam tlocrt burga, drugu, osim ziđa, iskazuje množina kvalitetnih ulomaka arhitektonske profane plastike i poneka zaostala pojedinost u zidovima. Treća faza gradnje pripada razdoblju ranoga novog vijeka, kada se ruševni zidovi burga, nakon njegova stradavanja, koriste u svrhe stražarskih mjesta. Izdvajaju se nalazi vrlo kvalitetne klesane arhitektonske plastike, odnosno kamenih okvira prozora i vratiju, koji pripadaju drugoj fazi burga. Analizom je ustanovljeno da se radi o vremenu prvih desetljeća 15. stoljeća, kada je burg u vlasništvu srednjoeuropskih magnata – grofova Celjskih, koji ga bogato i stilski opremaju u duhu onoga doba.*

*Ključne riječi: burg Vrbovec, Klenovec Humski, arheološka istraživanja, arhitektonska profana plastika, prozor, vrata, gotičke profilacije, grofovi Celjski, 15. stoljeće*

*The paper presents the mediaeval castle (burg) of Vrbovec, situated at the extreme west of the Hrvatsko Zagorje region. Following the introductory description of the appearance and position of the burg, as well as the basic historical information and results of archaeological investigation, the architecture of the burg is considered within a wider context. Three phases of construction are distinguishable. The first phase is evident from the very layout of the burg; the second, besides the walls, is apparent from the multitude of good-quality fragments of profane architectural stonework and occasional remaining details in the walls. The third phase of construction belongs to the Early Modern period, when the decrepit walls of the burg, following its devastation, are used as sentry posts. Finds of high-quality carved architectural stonework, more precisely stone frames of windows and doors, which belong to the second phase of the burg, are worthy of particular mention. The analysis established that this occurred in the first decades of the 15th century, when the burg was owned by central European magnates, the Counts of Celje, who lavishly furnished it in the spirit of the time.*

*Key words: castle of Vrbovec, Klenovec Humski, archaeological investigation, profane architectural stonework, window, door, Gothic mouldings, Counts of Celje, 15th century*

### 1. UVOD

Srednjovjekovni burg Vrbovec, u arheološkim krugovima poznat pod nazivom Plemički grad Vrbovec, o čijoj je prošlosti očuvano sjećanje i u toponimima *Veliki Gradiš*, *Veliko Gradišće*, nalazi se na krajnjem zapadnom dijelu Hrvatskoga zagorja, u mjestu Klenovcu Humskom (općina Hum na Sutli, katastarska općina Lupinjak).

Tijekom višegodišnjih arheoloških istraživanja toga lokaliteta, koja provodi Institut za arheologiju, na svjetlo dana je izašao tlocrt prizemnih zidanih ostataka burga sa svom bogatom slojevitošću. Između brojnih arheoloških nalaza, pronađenih u jasnim arheološkim kontekstima te stoga važnih za interpretaciju određenih faza života na burgu, kao zasebna cjelina ističu se nalazi kvalitetno klesane arhi-

### 1. INTRODUCTION

The mediaeval burg of Vrbovec, known in the archaeological circles as the Feudal Town of Vrbovec, whose history is remembered in the toponyms *Veliki Gradiš*, *Veliko Gradišće*, is situated in the extreme west of the Hrvatsko Zagorje region, in the Klenovec Humski village (the Hum na Sutli municipality, cadastral municipality Lupinjak).

The several-year-long archaeological investigation of that site, carried out by the Institute of Archaeology in Zagreb, brought to the light of day the layout of the ground floor built remains of the burg with all their rich stratigraphy. Among the many archaeological finds discovered in clear archaeological contexts and therefore important for the interpretation of specific phases of life on the burg, the



Plan 1 Burg Vrbovec, Klenovec Humski, situacijski plan 2008. g. (crtež: M. Vojtić i K. Vujica; dorada i snimak arhitektonske plastike: T. Tkalčec)

Plan 1 Castle of Vrbovec, Klenovec Humski, situation plan in 2008 (drawing: M. Vojtić and K. Vujica; finishing and positioning of architectural stonework: T. Tkalčec)

tektonske plastike, što je pokazatelj standarda gospodara burga u određenome vremenu.

Ovome radu cilj je, nakon osnovnog osvrtu na položaj i smještaj lokaliteta, na njegov povijesni kontekst i kratki pregled rezultata dosadašnjih istraživanja te nakon sagledavanja do sada istražene arhitekture burga i mogućeg vremena početka njegove izgradnje, usredotočiti se na klesanu arhitektonsku plastiku s Vrbovca te je na osnovi njenih stilskih značajki smjestiti u uže razdoblje.

Burg Vrbovec svojim smještajem na istaknutom, strmom, koničnom brijegu koji za oko 45 m nadvisuje sjevernije smještenu dolinu rijeke Sutle, zauzeo je osobito povoljan geostrateški položaj na granici Hrvatsko–Ugarske Kraljevine i Njemačkog Carstva. Uske riječne doline i klanci u srednjem su vijeku povezivale naselja i plemićke gradove bregovitoga zagorskog pejzaža. Dolinom Sutle tekao je odvojak ceste Celje–Krapina, koji je taj kraj povezivao s južnijom Kosteljinom i Kostelgradom te je nastavljao dalje na jug prema Posavini (Tomičić et al. 2001, 254, 258, sl. 3).

U srednjem vijeku vrbovečki je burg bio i središtem manje županije jer se spominje župan od Vrbovca, a utvrda je dala ime i vrbovečkom arhiđakonatu, čija je institucija preživjela turbulentna razdoblja kako srednjeg tako i novog vijeka. O burgu, dakle, prvi put posredno doznajemo iz povijesnih dokumenata iz godine 1267. g. spomenom župana – *comes de Vrbovch*, zatim se Vrbovec spominje 1269. g. kao sjedište istoimenoga arhiđakonata u Zagrebačkoj biskupiji (*archidiaconus de Vrbovch*). Utvrda se izriječno kao *castrum Vrbovch* navodi tek 1354. g. Godine 1397. kralj Žigmund Luksemburški Vrbovec daruje svome zetu grofu Hermanu Celjskom. Zacijelo je burg bio u vlasništvu Celjskih tijekom čitave njihove vladavine Zagorjem, do njihova izumrća 1456. godine. Kasnije saznajemo da ga Matija Korvin daruje banu Janu Vitovcu. Nedugo potom burg je stradao i biva napušten, o čemu svjedoče dokumenti iz 1463. (*abolitum castrum Wrbowcz*) i 1497. (*montem Werbowcz desertum, in quo castrum olim Werbowcz extasse dicitur*). Naziv Vrbovec već se iste godine upotrebljava za Veliki Tabor (*Thabor aliter Vrbowcz*), a kasnije, 1524. g., i za obližnji dvorac Mali Tabor (Tomičić 1989, 168; Tomičić 1995, 112; Tomičić et al. 2001, 254; Regan 2003, 81, 86–87).

Ruševine srednjovjekovnoga Vrbovca nalaze se na vrhu spomenutoga brijega *Velikog Gradiša*, čija zaravan zauzima površinu oko 650 m<sup>2</sup>. Duža os platoa, smjera sjever – jug, iznosi više od 30 m, dok je os u smjeru istok – zapad dugačka približno 25 m. Pod toponimom Veliki Gradiš vodi se i uzvisina koja se nalazi južnije neposredno od opisanoga koničnog brijega s arhitektonskim ostacima jezgre burga. Prije ljudskih djelatnosti na tome lokalitetu, čini se da se radilo o jednome brdu koje je graditeljskom preinakom, iskopom duboke grabe, prilagođeno potrebama vrbovečke utvrde. Upravo je s te južne strane bio i prilaz burgu, a duboka graba je vjerojatno bila premoštena pokretnim mostom. Dio cjeline vrbovečkoga srednjovjekovnoga kompleksa čini i manji južni brijeg koji nosi toponim *Mali Gradiš* ili *Malo Gradišće*, na kojem se ne naziru nikakvi vidljivi tragovi gradnje, i kojeg danas od sjevernog dijela kompleksa

finds of carved architectural stonework of quality workmanship, which can be taken as a marker of the standard of the burg lords in a given period, surfaced as a distinct whole.

The objective of this paper is to focus on the carved architectural stonework from Vrbovec and to place it within a narrower period on the basis of its stylistic features. Before tackling this, we shall provide a basic review of the position and situation of the site, its historical context as well as a brief survey of the results of previous investigations. Also, the already investigated architecture of the burg and the question of the beginning of its construction will be considered.

The castle of Vrbovec, by virtue of its position on a prominent, steep, conical hill that surmounts by around 45 m the valley of the Sutla river at its north, occupied a particularly advantageous geostrategic position on the border of the Kingdom of Hungary and Croatia and the German Empire. In the Middle Ages, the narrow river valleys and ravines connected the settlements and feudal towns of the hilly landscape of the Hrvatsko Zagorje region. Through the valley of the Sutla river ran a branch road of the Celje–Krapina road that connected the area with Kosteljina and Kostelgrad to the south, extending further south towards the Posavina region (Tomičić et al. 2001, 254, 258, sl. 3).

During the Middle Ages the Vrbovec castle was also the centre of a minor county, as corroborated by a mention of the count of Vrbovec. The fort also gave the name to the Vrbovec Archdeaconry, which survived through the turbulent periods of the Middle Ages as well as the Early Modern period. We, therefore, indirectly learn of the castle for the first time from historical documents when the *župan* – *comes de Vrbovch* is mentioned in 1267. Vrbovec is next mentioned in 1269 as the seat of a distinct archdeaconry in the Zagreb diocese (*archidiaconus de Vrbovch*). The fort is specifically mentioned as *castrum Vrbovch* rather late, in 1354. In 1357 Sigismund of Luxembourg made a gift of Vrbovec to his son-in-law, Count Hermann of Celje. The castle was certainly in possession of the Counts of Celje throughout their rule over Zagorje, until their extinction in 1456. We later learn that Matthias Corvinus gave it as a gift to *ban* Jan Vitovec. A little later the burg was devastated and abandoned, as confirmed by the documents from 1463 (*abolitum castrum Wrbowcz*) and 1497 (*montem Werbowcz desertum, in quo castrum olim Werbowcz extasse dicitur*). The name of Vrbovec is used already in that same year for Veliki Tabor (*Thabor aliter Vrbowcz*), and subsequently in 1524 also for the nearby castle of Mali Tabor (Tomičić 1989, 168; Tomičić 1995, 112; Tomičić et al. 2001, 254; Regan 2003, 81, 86–87).

The ruins of the mediaeval Vrbovec lie on top of the mentioned hill, *Veliki Gradiš*, whose plateau occupies a surface of around 650 square metres. The longer, north–south axis of the plateau is more than 30 m long, while the east–west axis is approximately 25 m long. The toponym *Veliki Gradiš* refers also to an elevation immediately to the south of the described conical hill with architectural remains of the burg core. Prior to human activities at that site, it appears that this had been a hill which by virtue of a constructional tran-



s glavnom utvrdom dijeli suvremena prometnica. Nedaleko Velikoga i Malog Gradiša, u njihovu podnožju s jugoistočne strane, smještena je barokizirana kapela Sv. Vida, koju susrećemo već 1334. godine u prvome poznatom popisu župa Zagrebačke biskupije (Buturac 1984, 105; Rački 1872, 229; Tkalčić 1874, 96).

Najranija istraživačka djelatnost na ovome arheološkom lokalitetu seže još u 19. stoljeće, kada je vlasnik dvorca Malog Tabora, irski barun Jakov Kawanagh, obavljao amaterske iskope, čini se na zapadnome dijelu obrambenog zida jezgre burga, slijedeći legendu o zakopanome zlatnom teletu (Tomičić et al. 2001, str. 254). O tim ranim radovima izvijestio je Josip Klemenc, daljnje podatke o Vrbovcu iznijeli su Vjekoslav Klaić i Emilij Laszowski, potom Gjuro Szabo u čijem je radu objavljena i fotografija s prikazom stanja ostataka vanjskoga obrambenog zida grada početkom 20. stoljeća (pretisak u Regan 2003, 87) te Anđela Horvat (Klaić 1909, 3, 18–20; Szabo 1912, 207; Szabo 1974, 36; Horvat A. 1985, 168–169; Tomičić 1987, 152; Tomičić 1989, 168; Tomičić et al. 2001, 254, bilj. 5–8). Izvan arheoloških krugova u novije se vrijeme na plemićki grad Vrbovec osvrnuo i Krešimir Regan koji je na osnovi konfiguracije terena vrbovečki kompleks podijelio na četiri osnovne cjeline: jezgru utvrde ili tzv. sjevernu utvrdu (lokalitet Veliko Gradišće), tzv. gornju središnju utvrdu (omeđenu sedlom i jezgrom utvrde), tzv. južnu utvrdu (lokalitet Malo Gradišće) te tzv. donju središnju utvrdu koja je povezivala sjeverni i južni dio utvrde u jedinstvenu obrambenu cjelinu (Regan 2003, 88, slika).

Prva stručna, arheološka iskopavanja poduzeo je Institut za arheologiju 1987. te, kasnije, 1994. g. pod vodstvom Željka Tomičića (Tomičić 1987, 150–153; Tomičić 1989; Tomičić 1995; 111–117). Ta su pokusna arheološka istraživanja 2001. godine prerasla u sustavna arheološka iskopavanja te se daljnjih godina redovito odvijaju u onolikom obujmu koliko to omogućuju dobivena sredstva za svaku godinu. Pažljivim iskopavanjem slojeva zemlje i šute (i do dva metra debljine) u razdoblju od 2001. do 2003. godine cjelovito je istražena unutrašnjost prostorija sjevernog dijela burga, odnosno otkriven je tlocrt sjevernoga, stambenoga i dvoranskog dijela arhitektonskog sklopa (Tomičić et al. 2001; Tomičić et al. 2003a; Tomičić et al. 2003b). Godine 2004. započeti su i prvi konzervatorski radovi pod vodstvom Tatjane Tkalčec iz Instituta za arheologiju, kojoj je narednih godina povjereni vodstvo nad ukupnim arheološko-konzervatorskim istraživačkim radovima na lokalitetu (Tkalčec 2004; Tomičić, Tkalčec 2004, 139; Tomičić, Tkalčec 2005, 70, sl. 3, sl. 4). U tim su radovima do 2007. godine konzervirani svi do tada arheološki otkriveni zidovi, obavljena su opsežna iskopavanja na sjeveru burga, izvan arhitektonskoga kompleksa, upravo kako bi se sjeverni zid burga oslobodio i pripremio za konzerviranje.<sup>1</sup> Sličnim zahvatima podvrgnute su i sjeverozapadna i sjeveroistočna površina zaravni burga, neposredno uz samu jezgru burga (Tkalčec 2006a, 87, sl. 2, 88, sl. 3; Tkalčec 2006b, 143, slike; Tkalčec 2007a, 71, sl. 1, 72, sl. 2; Tkalčec 2007b; Tkalčec 2008a; Tkalčec 2008b, 77, sl. 1,

<sup>1</sup> Istraživanja su financirana potporom Ministarstva kulture Republike Hrvatske, zatim Općine Hum na Sutli i Krapinsko-zagorske županije, a veliku je pomoć pružila i tvornica stakla Vetropack–Straža iz Huma na Sutli.

sformation – the excavation of a deep ditch – was adapted to serve the requirements of the Vrbovec fort. The access to the castle was precisely from the south, and the deep ditch was probably spanned by a drawbridge. A small hill at the south, known as *Mali Gradiš* or *Malo Gradišće*, forms part of the mediaeval complex of Vrbovec. It exhibits no visible traces of construction, and it is presently divided by a modern road from the northern part of the complex with the main fort. In the vicinity of Veliki Gradiš and Mali Gradiš, at their southeastern foot, stands a chapel of St. Vid, reconstructed in the Baroque style, known already from 1334 from the first known list of parishes of the Zagreb Diocese (Buturac 1984, 105; Rački 1872, 229; Tkalčić 1874, 96).

The earliest investigations at this archaeological site date from as early as the 19<sup>th</sup> century, when the owner of the Mali Tabor castle, the Irish baron Jakov Kawanagh, carried out amateur excavations at, it appears, the western part of the defensive wall of the burg core. He drew his inspiration for this action from the legend about the golden calf that was supposedly buried there (Tomičić et al. 2001, 254). These early acts were reported by Josip Klemenc, while subsequent data on Vrbovec were provided by Vjekoslav Klaić and Emilij Laszowski, and later also by Gjuro Szabo, who published a paper with a photograph of the remains of the exterior defensive wall of the castle at the beginning of the 20<sup>th</sup> century (reprinted in Regan 2003, 87), as well as Anđela Horvat (Klaić 1909, 3, 18–20; Szabo 1912, 207; Szabo 1974, 36; Horvat A. 1985, 168–169; Tomičić 1987, 152; Tomičić 1989, 168; Tomičić et al. 2001, 254, note 5–8). Outside archaeological circles the Vrbovec feudal town was recently reviewed by Krešimir Regan, who, based on terrain configuration, divided the Vrbovec complex into *four basic units: the core of the fort or the so-called northern fort (the site of Veliko Gradišće); the so-called upper central fort (delimited by the ridge and the core of the fort), the so-called southern fort (the site of Malo Gradišće) and the so-called lower central fort, which connected the northern and the southern parts of the fort into an integral defensive unit* (Regan 2003, 88, figure).

The first professional archaeological excavations were carried out by the Institute of Archaeology in Zagreb in 1987 and, later also in 1994, under the directorship of Željko Tomičić (Tomičić 1987, 150–153; Tomičić 1989; Tomičić 1995; 111–117). These test archaeological excavations developed in 2001 into systematic archaeological excavations that take place every year in the scope proportional to the allocated financial means. Careful excavation of layers of earth and construction waste (up to two metres thick) between 2001 and 2003 entirely revealed the interior of the rooms in the northern part of the castle, that is, the layout of the northern, residential and palatial quarter of the architectural complex was brought to light (Tomičić et al. 2001; Tomičić et al. 2003a; Tomičić et al. 2003b). The first conservation works started in 2004 under the management of Tatjana Tkalčec, who was entrusted with the management of the entire archaeological and conservation investigation works at the site in the subsequent years (Tkalčec 2004; Tomičić, Tkalčec 2004, 139; Tomičić, Tkalčec 2005, 70, sl. 3, sl. 4). Until 2007, all the walls that were uncovered in archaeological investigations have



Sl. 1 Burg Vrbovec, pogled s juga na ulaz u kuhinju i dovratnik PN 199 tijekom arheoloških istraživanja 2003. g. (foto: M. Dizdar)  
 Fig. 1 The castle of Vrbovec, a view from the south to the kitchen entrance and door jamb SF 199 during archaeological investigations in 2003 (photo: M. Dizdar)

78, sl. 2, 29, sl. 3). Godine 2008. nastavljena su istraživanja na istočnome i jugoistočnom dijelu dvorišta burga, kao i na površini istočno od zidova jezgre burga, gdje su još prethodne godine definirani pojedini zidovi koji ukazuju da je vrbovečki burg bio složenijeg tlocrta nego što se to u početku samih arheoloških iskopavanja činilo (Tkalčec 2009, slika 1–3).

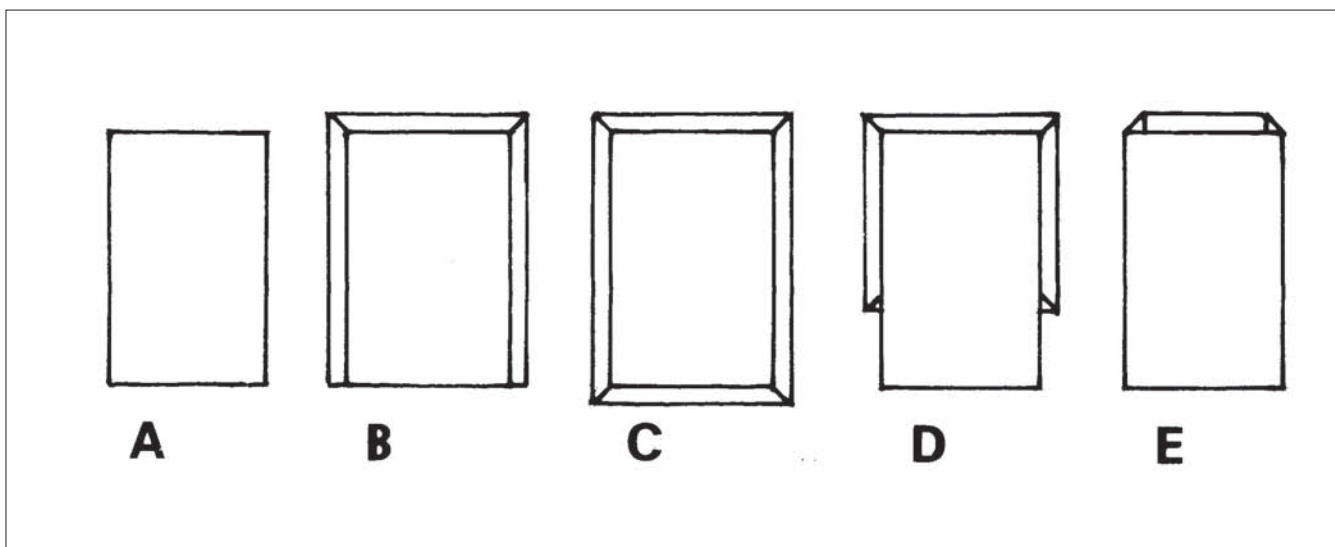
U ukupnim dosadašnjim arheološkim istraživanjima definiran je tlocrt obodnog zida burga i istraženi su u cjelini ostaci i prostori prizemlja sjevernog dijela kompleksa (plan 1). Burg je poligonalnoga tlocrta, vanjskih dimenzija 21 m (istok–zapad) x 29,8 m (sjever–jug). Sastoji se od palasa na sjeveru (u prizemlju troprostorno podijeljenog), branič-kule na jugu, tj. jugozapadu, cisterne u jugozapadnome dijelu dvorišta uz kulu te manje istočne prostorije nepravilnoga tlocrta (Tomičić et al. 2003a, 172, slika; Tomičić et al. 2003b, 135, sl. 1; Tomičić, Tkalčec 2005, 69, sl. 2). Ulaz je (u nekoj graditeljskoj fazi burga) mogao biti na istočnoj strani, oko sredine istočnoga obrambenog zida. Na tome su prostoru pronađeni elementi (sjevernije pozicionirani tragovi drvenih stupova te zidovi izvan gabarita jezgre burga) koji bi se mogli tumačiti sustavom obrane ulaza (Tkalčec 2009, sl. 1). Jedan burg je tijekom vremena svoje egzistencije mo-

been conserved; extensive archaeological excavations at the north of the burg were carried out, precisely in order to uncover the northern wall of the burg and prepare it for conservation.<sup>1</sup> Similar interventions were carried out on the northwestern and northeastern surfaces of the burg plateau, adjacent to the core of the castle (Tkalčec 2006a, 87, sl. 2, 88, sl. 3; Tkalčec 2006b, 143, slike; Tkalčec 2007a, 71, sl. 1, 72, sl. 2; Tkalčec 2007b; Tkalčec 2008a; Tkalčec 2008b, 77, sl. 1, 78, sl. 2, 29, sl. 3). The excavation at the eastern and southeastern portions of the burg courtyard resumed in 2008, as well as the excavation at the surface east of the walls of the burg core, where already during the previous season certain wall portions were identified that suggest that the Vrbovec castle had a more complex layout than believed at the beginning of the archaeological excavation (Tkalčec 2009, slika 1–3).

The archaeological excavations conducted so far resulted in the determination of the layout of the perimeter wall of the castle and the complete investigation of the remains and spaces of the ground floor of the northern part of the

<sup>1</sup> The excavation was financially supported by the Ministry of Culture of the Republic of Croatia, the Hum na Sutli Municipality and the Krapina–Zagorje County. We were greatly supported also by the Vetropack–Straža Glass Factory from Hum na Sutli.





Sl. 2 Uobičajeno oblikovanje kamena doprozornika s ukošenim rubom (crtež: Z. Horvat)  
 Fig. 2 The usual form of a stone window jamb with a beveled edge (drawing: Z. Horvat)

gao mijenjati pozicije i sustav obrane ulaza (Horvat Z. 1998, 46, sl. 9). Možda ulaz na vrbovečkom burgu valja očekivati na prostoru južnije od linije južnog zida istočne prostorije trapezoidnog tlocrta. Čini se da je branič–kula poligonalna (peterokutna?) tlocrta. Za sad se najbolje vidi tek vanjsko lice temeljna zida na jugozapadnoj strani, izgrađeno velikim komadima kamenja i s jakim pokosom. Na jugoistočnome dijelu burga, koji još nije u cjelini istražen, nisu pronađeni tragovi kamenom zidanih prostorija pa se pretpostavlja da je taj prostor srednjovjekovnim gospodarima koristio u gospodarske svrhe te da su na tome prostoru bili podignute neke drvene zgrade. Njima, međutim, u arheološkim iskapanjima nije pronađeno tragova jer je taj prostor u ranome novom vijeku bio intenzivno korišten, što će biti objašnjeno u daljnjem tekstu.

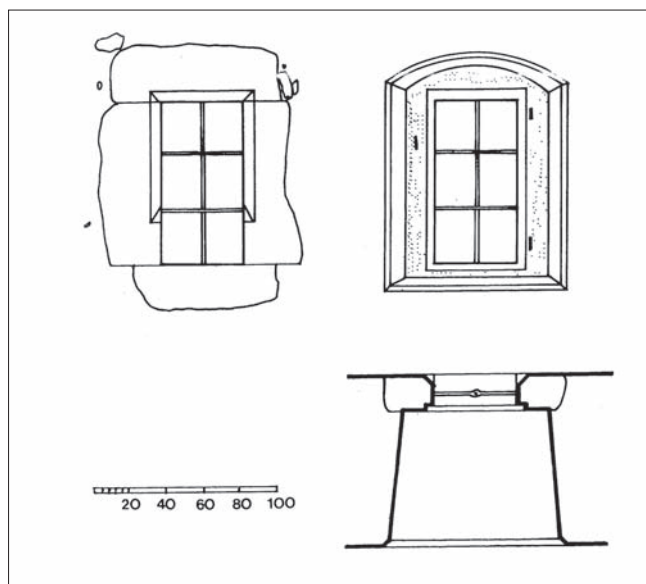
Cjelovito je istražena unutrašnjost prizemnih prostorija sjevernog dijela burga. Taj je prostor prvobitno bio raščlanjen na manju zapadnu prostoriju u kojoj je bila smještena kuhinja te veliku istočnu prostoriju gospodarske namjene, a poslije je pregrađen u tri prostorije, još u vremenu kada je burg funkcionirao. Od te tri prostorije, dvije imaju ulaze iz dvorišta. Zidovi su prilične debljine – vanjski 196–200 cm, dok su unutrašnji ponešto tanji: zapadni pregradni zid je širine 120 cm, istočni 92 cm, a unutrašnji zidovi prema dvorištu široki su 141–145 cm. Pod prostorija bio je zaravnani živi kamen. Zapadnu se prostoriju, prema arheološkim nalazima, može odrediti kao kuhinju, s tragovima ognjišta, ulomcima kuhinjskog posuđa i sl. Ulaz u kuhinju je djelomično očuvan, s pragom i dijelom kamena dovratnika PN 199,<sup>2</sup> profiliranog jednostavnim ukošenjem (sl. 1). Niša vratiju na unutrašnjoj strani dovratnika široka je 106 cm pa se u naravi može očitati svijetla širina 76 cm. Na tom području pronađen je i karakterističan ulomak kamena nadvratnika PN 150, oblikovanog “na heljdino zrno” (sl. 15, dolje lijevo, T. 8), o čemu će biti više riječi u daljnjem tekstu.

Iščitavanjem arheoloških slojeva ustanovljeno je da su

complex (Plan 1). The burg has a polygonal layout, measuring 21 m (east–west) by 29,8 m (north–south) on the outside. It consists of a palace in the north (divided into three rooms at the ground floor), a keep in the south, i.e. southeast, a cistern in the southwestern portion of the courtyard next to the tower and a smaller eastern room of irregular layout (Tomičić et al. 2003a, 172, figure; Tomičić et al. 2003b, 135, sl. 1; Tomičić, Tkalčec 2005, 69, sl. 2). The entrance (in one of the construction phases of the castle) may have been on the east, around the middle of the eastern defensive wall. That zone yielded elements (traces of wooden post–holes lying more to the north as well as walls situated outside the perimeter of the burg core) that might be interpreted as belonging to the system of the defence of the entrance (Tkalčec 2009, sl. 1). A castle may have changed the position of the entrance and the system of its defence during its existence (Horvat Z. 1998, 46, sl. 9). Perhaps we should expect to find the entrance to the Vrbovec castle in the zone south of the southern wall of the eastern trapezoidal room. It appears that the keep had a polygonal (pentagonal?) layout. One can presently clearly see only the outside face of the foundation wall at the southwestern side, built of large stones and with a pronounced slope. The southeastern part of the castle, which has not been entirely investigated yet, yielded no traces of stone–built rooms, and it is assumed that the mediaeval lords used this zone for economic purposes and that wooden buildings were erected there. However, archaeological excavations failed to reveal traces thereof because this zone was intensely used in the Early Modern period, as will be explained later in the text.

The interior of the ground floor rooms in the northern portion of the castle has been thoroughly investigated. This space was initially divided into a smaller western room with a kitchen and a large eastern room serving economic purposes. Subsequently, while the burg was still in function, it was divided into three rooms, two of which are accessed from the courtyard. The walls are fairly thick – the exterior

2 Terenska oznaka PN 199 znači poseban nalaz br. 199.



Sl. 3 Ozalj, burg i palas Nikole Zrinskog, prozor u zapadnom zidu prizemlja (pogled izvana, iznutra i tlocrt) (crtež: Z. Horvat)

Fig. 3 Ozalj, the castle and the palace of Nikola Zrinski, a window in the western wall of the ground-floor (a view from the outside, inside and a ground-plan) (drawing: Z. Horvat)

na katu (ili katovima) bile stambene prostorije vlasnika grada, a vjerojatno i viteška dvorana. Kao što će to pokazati analiza arhitektonske plastike, u 15. stoljeću, u vrijeme vladavine grofova Celjskih, burg se oprema raskošnim kamenim okvirima vrata i prozora, klesanima u duhu zrele gotike. Vjerojatno tada dolazi i do pregrađivanja sjeveroistočne prizemne gospodarske prostorije u dvije, čime je nastala troprostorna organizacija prizemlja sjevernoga dijela burga. U tom razdoblju prve polovine 15. stoljeća dolazi i do dozivanja manje istočne prostorije nepravilnoga, trapezoidnog tlocrta. Iz razdoblja kraja života na gradu potječu različiti nalazi pronađeni u zemlji i šuti koja je nastala zasipavanjem i urušavanjem gornjega kata. Istraživanja su pokazala da je burg stradao u požaru. Izgorjeli strop iznad prizemlja (izrađen od hrastovine i jelovine), urušio se u prizemni prostor. S njima je u prizemlje propao i čitav sadržaj prostorija s kata. U konačnici je došlo i do urušavanja zidova koji su na taj način, možemo reći, zapečatili jedan isječak povijesti u slojevima koje su prekrili (Tkalčec 2008a, 14). Svi ti nalazi ukazuju na razdoblje 15. stoljeća, a prekrilo ih je sloj paljevine i ruševine. Međutim, nakon toga prvog stradavanja čini se da se život iznova vratio na grad, o čemu svjedoče arheološki nalazi s početka 16. stoljeća.

Burg je zaista stradao i napušten je sredinom 15. stoljeća, o čemu nam govore i povijesni izvori, i to burg u punom smislu te riječi, dakle, Vrbovec kao upravno sjedište vlastelinstva plemića te kao središta arhidakonata u 16. stoljeću nanovo je bio zaposjednut, služeći vjerojatno uglavnom kao sijelo vojne posade. Možda je sam lokalitet početkom 16. stoljeća bio u posjedu braće Ladislava II. i Benedikta Rattkaya. Naime, oni kraljevom darovnicom od 1507. g. dobivaju u posjed Klenovec, zvan Vrbovec (Gulin 1985, 61; Gulin 1995, 12). U 16. i 17. stoljeću su glavni gradovi i kurije Rattkajevih bili u Velikom i Malom Taboru te u Velikoj Horvatskoj, stoga je za

wall is 196–200 cm thick, while the interior ones are a little thinner: the western partition wall is 120 cm wide, the eastern 92 cm, while the interior walls towards the courtyard are 141–145 cm wide. The floor of the rooms was flattened bedrock. The western room, judging by the archaeological finds, can be interpreted as a kitchen, with traces of a hearth, kitchenware shards etc. The entrance into the kitchen is partly preserved, with a threshold and a part of a stone jamb SF 199,<sup>2</sup> profiled with a simple slope (Fig. 1). A niche on the inside of the door jamb is 106 cm wide, allowing an assessment of the door width of 76 cm. This zone yielded also a characteristic fragment of a stone lintel SF 150, in the shape "of a buckwheat grain" (fig. 15, bottom left, Pl. 8), which will be further discussed later in the text.

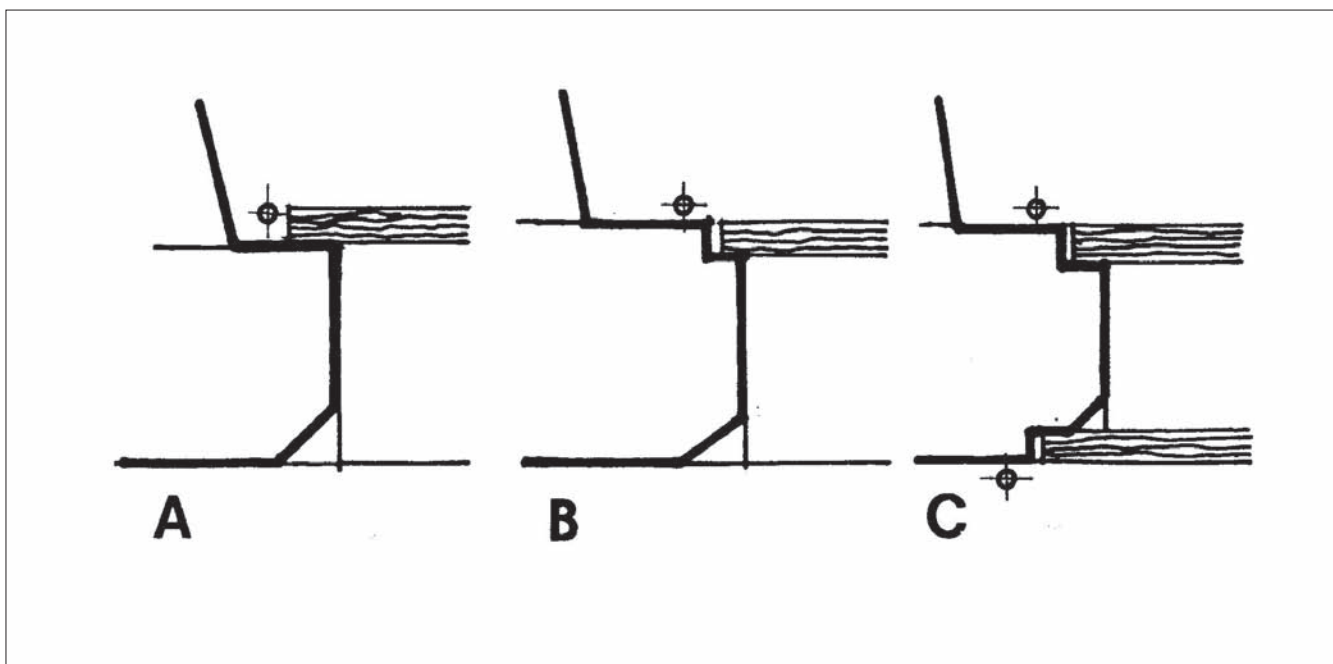
Analysis of archaeological layers determined that the upper floor (or floors) housed the residential quarters of the castle lord, and probably also a knights' hall. As the analysis of architectural stonework will demonstrate, in the 15<sup>th</sup> century, during the rule of the Counts of Celje, the castle was furnished with lavish stone frames of doors and windows, carved in the spirit of mature Gothic. This is probably also the time when the northeastern ground floor room was partitioned into two separate rooms, which brought about the tripartite layout of the ground floor of the northern portion of the castle. In that period of the first half of the 15<sup>th</sup> century the smaller eastern room with an irregular trapezoidal layout was built as an addition. The final period of life in the castle yielded various finds discovered in the earth and construction waste produced by the filling and collapse of the upper floor. The investigation showed that the castle was destroyed in a fire. The burnt ceiling above the ground floor (made of oak and fir wood) collapsed into the ground floor together with the entire inventory of the upper floor rooms. Eventually, the walls also collapsed, sealing so to speak a segment of history in the layers they covered (Tkalčec 2008a, 14). All those finds point to the 15<sup>th</sup> century, and they were covered by a layer of cinder and debris. However, it appears that life in the castle resumed following this first destruction, as testified by the archaeological finds from the beginning of the 16<sup>th</sup> century.

The castle was indeed destroyed and abandoned in the mid-15<sup>th</sup> century, as corroborated by the historical sources. This applies to the burg proper, i.e. Vrbovec as the administrative centre of the feudal estate and the seat of the archdeaconry. In the 16<sup>th</sup> century it was reoccupied, when it probably served mostly as a garrison for the military. In the beginning of the 16<sup>th</sup> century the site itself may have been owned by brothers Ladislav II and Benedict Rattkay, who were granted the possession of the Klenovac estate, known as Vrbovec, by a royal charter in 1507 (Gulin 1985, 61; Gulin 1995, 12). In the 16<sup>th</sup> and 17<sup>th</sup> centuries the main castle and manors of the Rattkay family were in Veliki Tabor and Mali Tabor as well as in Velika Horvatska, which allows the assumption that certain finds from the Vrbovec castle from the 16<sup>th</sup>-century layer are connected with this feudal family.

Archaeological evidence reveals that the already decrepit castle went through another great fire in the Early Mo-

2 Fieldwork mark SF 199 refers to special find no. 199.





Sl. 4 Uobičajeni načini izvođenja utora za krilo na doprozorcima (A–bez utora, B–s jednim utorom; unutrašnja strana, C–s dva utora; vanjska strana (donji utor je za drveni kapak) (crtež: Z. Horvat)

Fig. 4 The usual forms of casement grooves on window jambs (A–without a groove, B–with one groove; interior, C–with two grooves; exterior (the lower groove is for a wooden casement) (drawing: Z. Horvat)

pretpostaviti da određeni nalazi s burga Vrbovca iz sloja 16. stoljeća imaju veze s ovom velikaškom porodicom.

Prema arheološkim nalazima, već derutni burg doživio je još jedan veliki požar u ranome novom vijeku. O životu na burgu u 16. stoljeću izvanredne podatke su dala arheološka istraživanja provedena 2008. godine, u kojima su na jugoistočnom prostoru dvorišta burga, ali i na porušenim temeljima izvornoga srednjovjekovnog zida burga (na kojem su uočena i namjerna kasnija snižavanja zidine) pronađeni ostaci drvene građevine koja je sadržavala nalaze 16. stoljeća, a koja je srušena i stradala u velikome požaru. Osim tog nalaza te sličnih nalaza iz prijašnjih godina, i otkriće ostataka zida podignutog na šuti 15. stoljeća ispred prostora na kojem je u 16. stoljeću bilo podignuto spomenuto drveno zdanje, također nam ukazuje na život na prostoru porušenoga srednjovjekovnog burga još u razdoblju ranoga novog vijeka (Tkalčec 2008a, 16–17; Tkalčec 2009).

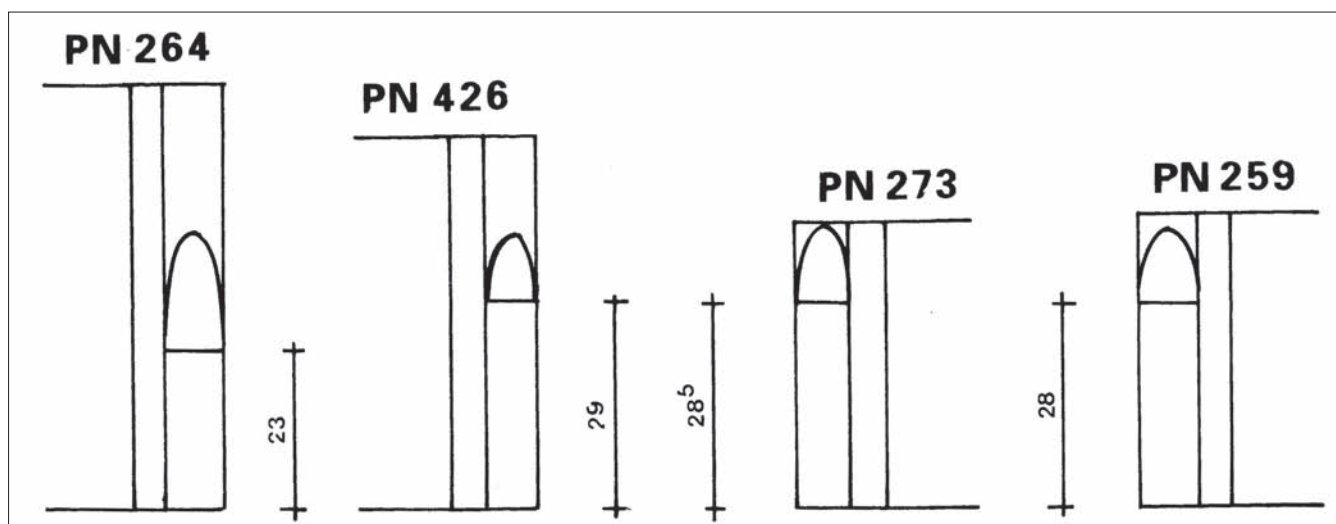
## 2. ARHITEKTURA BURGA VRBOVCA U VREMENSKOM I ŠIREM PROSTORNOM KONTEKSTU

Iako to na prvi pogled tako ne izgleda, osnovni položaj Vrbovca – njegov smještaj na terenu – ima značajke tzv. aksijalnog burga 12.–13. st. U prilog toj konstataciji govori već slijed toponima na samome terenu: Veliki Gradiš, Mali Gradiš te omanji humak između njih. Sam tlocrt burga odgovara prilično koncentriranom objektu, no njega ne treba promatrati izdvojeno od ulaza u burg i podgrađe, a osobito se nasmije izostaviti Mali Gradiš, bez obzira što je on zasad potpuna nepoznanica. Ovakva struktura položaja javlja se na mnogim burgovima 13. st. u nas, a pri tome je bitno

modern period. Exceptional information on the life in the burg in the 16<sup>th</sup> century was obtained by archaeological excavations carried out in 2008. At the southeast of the courtyard of the castle, but also on the destroyed foundations of the original mediaeval wall of the castle (which exhibits also deliberate lowering of the walls at a later time) remains of a wooden building with 16<sup>th</sup>-century finds were discovered. The building was destroyed in a great fire. Besides this find and similar finds from previous years, the discovery of the remains of a wall erected on the 15<sup>th</sup>-century construction waste in front of the zone where the mentioned wooden structure was built in the 16<sup>th</sup> century, is another element indicating that life still went on within the ruined mediaeval castle as late as the Early Modern period (Tkalčec 2008a, 16–17; Tkalčec 2009).

## 2. ARCHITECTURE OF THE CASTLE VRBOVEC IN A CHRONOLOGICAL AND WIDER SPATIAL CONTEXT

Although it may not look like that at the first sight, the basic position of Vrbovec – its situation on the ground – exhibits features of the so-called axial burg of the 12<sup>th</sup>–13<sup>th</sup> cent. This is corroborated by the sequence of toponyms in the area: Veliki Gradiš, Mali Gradiš and the moderately small mound between them. The layout of the burg itself matches a fairly dense structure, but it should not be considered separately from the entrance to the burg and the lower bailey, and one should definitely not leave Mali Gradiš out, regardless of the fact that virtually nothing is known about it at present. Many 13<sup>th</sup>-century castles in Croatia exhibit a similar layout, in which the existence of two to three locations one next to the other is a characteristic feature. We en-



Sl. 5 Usporedni prikaz baza profilacija prozora srednje veličine (crtež: Z. Horvat)  
 Fig. 5 A comparison of moulding bases of medium-sized windows (drawing: Z. Horvat)

postojanje dvije do tri lokacije, jedne uz drugu. Nalazimo ih dosta istočno od Zagreba pa i kod nizinskih utvrda, npr. Međurić (Sekelj Ivančan, Tkalčec 2002, 173, sl. 5–6, 174) ili pak, primjerice, Jelengrad i Kutinecgrad, ali ima ih i drugdje: Žumberak, Cetin – “Mala crkvina” (Horvat Z. 1997, 29, sl. 2; Horvat Z. 2006, 154, sl. 39; Horvat Z. 2008, 31, 32).

S obzirom da je u drugoj polovini 13. stoljeća, odnosno nakon mongolske provale 1242. godine, učestalo podizanje kamenih utvrda, a na prostoru Zagorske županije je tada djelovao plemić Farkaš, koji je podignuo burgove Kostel i Oštrc i kojemu je, zbog njegovih zasluga u borbi s Mongolima godine 1247. Bela IV. dao dozvolu da izgradi svoj već započeti (neimenovani) grad (Klaić V. 1909, 6; Fügedi 1986, 72), za pretpostaviti je da su i počeci burga Vrbovca povezani s Farkaševim aktivnostima. Međutim, određene pojedinosti iz arheoloških istraživanja otvaraju mogućnost da je burg Vrbovec građen i prije 1242. godine. Tako je istraživanjem 2007. godine u sondi na zapadnome, tj. sjeverozapadnom dijelu burga, izvan gabarita njegove jezgre, ustanovljeno postojanje tragova neke drvene konstrukcije, koja je bila učvršćivana nabojima sterilne gline. Ustanovljeno je, naime, kako se na ovoj površini izmjenjuju tanki slojevi “sterilne” gline i tanki kulturni slojevi s nalazima keramike i životinjskih kostiju (Tkalčec 2008b, 77–78, sl. 2).

Tipološko kronološka analiza pronađenoga keramičkog materijala iz kulturnih slojeva, potvrđena apsolutnodatacijskim metodama, odnosno C14 analizama,<sup>3</sup> pokazuje da je drvena struktura ovdje stajala te bila popravljana i učvršćivana tijekom dužega razdoblja, do stotinjak godina. Tako su analize ugljena prikupljene iz najgornjeg sloja žute, “sterilne” gline (SJ 091, U–214),<sup>4</sup> koji je ležao ispod kulturnog sloja rahle smeđe–crne ilovače, bogatoga kasnosrednjovjekovnim nalazima, i u kojem su zamijećeni ostaci i tragovi

counter a number of them east of Zagreb, even in the case of lowland forts, e.g. Međurić (Sekelj Ivančan, Tkalčec 2002, 173, sl. 5–6, 174) or, for instance, Jelengrad and Kutinecgrad. They are also found elsewhere: Žumberak, Cetin – “Mala Crkvina” (Horvat Z. 1997, 29, sl. 2; Horvat Z. 2006, 154, sl. 39; Horvat Z. 2008, 31, 32).

In the latter half of the 13<sup>th</sup> century, that is, in the wake of the Mongol invasion in 1242, stone fortifications proliferate. At that time the nobleman Farkaš was active in the Zagorje county. He erected the castles of Kostel and Oštrc, and on account of his merits in the fight against the Mongols in 1247, king Bela IV permitted him to finish the construction of his (unnamed) castle (Klaić V. 1909, 6; Fügedi 1986, 72). In view of all that, we can assume that the beginnings of the castle of Vrbovec are connected with Farkaš' activities. However, certain details from the archaeological investigations open a possibility that the construction of the castle Vrbovec had taken place even prior to 1242. The 2007 investigation of the trench at the western, i.e. northwestern portion of the castle, outside its core perimeter, revealed traces of a wooden structure that had been reinforced with packed sterile clay. It was established that thin layers of “sterile” clay alternate in that zone with thin cultural layers with finds of ceramics and animal bones (Tkalčec 2008b, 77–78, sl. 2).

A typological–chronological analysis of the discovered ceramic material from the cultural layers, corroborated by methods of absolute dating, that is, C<sup>14</sup> analyses,<sup>3</sup> showed that the wooden structure stood there, and was repaired and reinforced, over a longer period of time, up to a hundred years. Charcoal analyses from the uppermost layer of yellow “sterile” clay (SU 091, S–214),<sup>4</sup> which underlay the cultural layer of loose brown–black loam, rich in late mediaeval finds and containing traces of vertical posts and ho-

3 Analize ugljena metodom radioaktivnog ugljika provedene su na Sveučilištu u Kielu u Leibniz–laboratoriju za radiometrijska datiranja i istraživanja stabilnih izotopa (KIA – Leibniz Labor für Altersbestimmung und Isotopenforschung, Christian–Albrechts–Universität, Kiel).

4 Terenske oznake SJ i U označavaju “stratigrafsku jedinicu” i “uzorak”.

3 The radiocarbon charcoal analyses were carried out at the Leibniz Laboratory for Radiometric Dating and Stable Isotope Research of the Kiel University (KIA – Leibniz Labor für Altersbestimmung und Isotopenforschung, Christian–Albrechts–Universität, Kiel).

4 Field marks SU and S stand for “stratigraphic unit” and “sample”.



Sl. 6 Burg Vrbovec, PN 426 – lijeva baza profilacije prozora srednje veličine s ostacima žutog i oker bojanja kvadratičnih polja (foto: T. Tkalčec)

Fig. 6 The castle of Vrbovec, SF 426 – left base of the moulding of a medium-sized window with the remains of yellow and ochre painting of square fields (photo: T. Tkalčec)

okomito ubadanih stupova i vodoravno polaganih greda, dale radiokarbonsku starost BP 703 ± 26 (KIA36567). Kalibrirane vrijednosti prema rasponu spektra dvije sigme<sup>5</sup> daju raspon od 1264. do 1303. godine.<sup>6</sup>

Iz najdonjeg pak kulturnog sloja SJ 164, koji je ležao na samome živcu, a iznad kojega su se, dakle, izmjenjivali naboji žute, "sterilne" gline i kulturni slojevi, na C14 analizu su predana dva kontrolna uzorka ugljena. Uzorak ugljena U-250/1 (KIA33850) pokazao je radiokarbonsku starost BP 860±29. Kalibrirane vrijednosti prema dvije sigme dale su raspon od 1050. do 1256. godine.<sup>7</sup> Analiza drugog uzorka U-250/2 (KIA36565) rezultirala je radiokarbonskom starošću BP 867±21 s kalibriranim vrijednostima prema dvije sigme

5  $\sigma$ =standardna devijacija

6 Ukupna vjerojatnost – 95.4%, odnosno cal AD 1264–1303 (vjerojatnost 84,0%) i 1366–1383 (vjerojatnost 11,4%). Prema jednoj sigmi kalibracija je dala razdoblje cal AD 1273–1303 (vjerojatnost 68,3%).

7 Ukupna vjerojatnost – 95.4%, odnosno cal AD 1050–1083 (vjerojatnost 9,5%), 1124–1136 (vjerojatnost 1,9%) i 1151–1256 (vjerojatnost 84,0%). Prema jednoj sigmi kalibracija je dala razdoblje cal AD 1161–1217 (vjerojatnost 68,3%).

horizontal beams, produced radiocarbon age of BP 703 ± 26 (KIA36567). Two-sigma<sup>5</sup> calibrated values indicate a range between 1264 and 1303 A.D.<sup>6</sup>

As many as two control charcoal samples were sent for a C<sup>14</sup> analysis from the lowermost cultural layer SU 164, which lay on top of the bedrock and above which layers of yellow "sterile" clay alternate with cultural layers. Charcoal sample S-250/1 (KIA33850) exhibited radiocarbon age BP 860±29. Two sigma calibrated values showed a range between 1050 and 1256 A.D.<sup>7</sup> The analysis of the second sample S-250/2 (KIA36565) showed radiocarbon age BP 867±21 with 2-sigma calibrated values between 1052 and 1222.<sup>8</sup>

All these examinations, confirmed also by the typological-chronological analysis of archaeological finds from the pertinent layers, indicate that the life in the castle, that is the construction of the first burg, started somewhere in the period from the end of the 12<sup>th</sup> century to the third decade of the 13<sup>th</sup> century, i.e. before the Mongol invasion in 1242.

The architectural details, for instance, the slope of the walls and large stone blocks visible on the western outer face of the southern keep at Vrbovec, whose physical, that is, stratigraphic relation to the remaining walls of the burg has not yet been ascertained, might suggest the period before the mid-13<sup>th</sup> century (Horvat Z. 1996, 194).

Further evidence for a possible earlier date is found in the great resemblance of the Vrbovec castle with the Dunkelstein burg in Lower Austria, dated from 1100 to the mid-13<sup>th</sup> cent. (Kühntreiber 2006). Considering that the latter is an example of a thoroughly investigated and published site, it deserves a detailed attention. Dunkelstein exhibits exceptionally instructive examples of an archaeologically determined layout of the interior rooms of a castle, that is, archaeologically determined spatial functions within a burg. Its spatial layout is very similar to that of Vrbovec, with the difference that Dunkelstein has a courtyard behind the tower or, in other words, the tower stands within the courtyard. There are two rooms at the north (in fact probably three, but the eastern part has not been entirely investigated yet; on the whole, not everything was investigated because the Way of the Cross presently occupies that position). The western room was the kitchen with a table hearth (like at Vrbovec), which contained a lot of ceramics, animal bones and fish scales. The eastern room was used as a larder. A layer of

5  $\sigma$ =standard deviation.

6 Overall probability – 95.4%, that is, cal AD 1264–1303 (probability 84,0%) and 1366–1383 (probability 11,4%). One-sigma calibration gave the result cal AD 1273–1303 (probability 68,3%).

7 Overall probability – 95.4%, that is, cal AD 1050–1083 (probability 9,5%), 1124–1136 (probability 1,9%) and 1151–1256 (probability 84,0%). One-sigma calibration gave the result cal AD 1161–1217 (probability 68,3%).

8 Overall probability 95.4%, that is, cal AD 1052–1080 (probability 6,7%), 1128–1132 (probability 1,0%) and 1152–1222 (probability 87,8%). One-sigma calibration gave the result cal AD 1165–1208 (probability 68,3%).

As a control measure for the dating of the sedimentation of these layers, we submitted for analysis a charcoal sample (S-223) from one of the cultural layers (SU 135), situated between two "sterile" layers and other cultural layers. The analysis (KIA36566) confirmed the period between the dates for the lowermost layer SU 164 and the upper layer SU 91, that is BP 809±26 (two sigma – cal AD 1183–1270, probability 94,4% and one sigma cal AD 1218–1257, probability 68,3%).



od 1052. do 1222. godine.<sup>8</sup>

Sva ova ispitivanja, potvrđena i tipološko-kronološkom analizom arheoloških nalaza iz relevantnih slojeva, ukazivala bi na to da je život na burgu, odnosno izgradnja prvog burga započela negdje u razdoblju od kraja 12. stoljeća do trećeg desetljeća 13. stoljeća, dakle, prije mongolske provala 1242. godine.

I arhitektonski detalji poput, primjerice, kosina zidina i velikih kamenih blokova vidljivih na zapadnome vanjskom licu južne branič-kule na Vrbovcu, za koju još nije točno ustanovljeno u kakvom je fizičkom, tj. stratigrafskom odnosu s ostalim zidovima burga, mogli bi ukazivati na vrijeme prije sredine 13. stoljeća (Horvat Z. 1996, 194).

Daljnju potvrdu mogućoj ranijoj dataciji nalazimo u velikoj sličnosti vrbovečkog burga s burgom Dunkelstein u Donjoj Austriji, datiranom od 1100. do polovine 13. st. (Kühntreiber 2006). Kako je to primjer detaljno arheološki istraženoga i objavljenog lokaliteta, valja ga malo podrobnije razmotriti. Naime, kod Dunkelsteina imamo izvanredne primjere arheološki ustanovljene organizacije unutrašnjih prostorija burga, odnosno arheološki određene funkcije prostora u burgu. Prostorni raspored vrlo je sličan vrbovečkome, osim što Dunkelstein iza kule još ima dvorište, odnosno kula mu se nalazi unutar dvorišta. Na sjeveru su dvije prostorije (vjerojatno i tri, no istočni dio nije u potpunosti istražen; općenito nije sve istraženo jer se danas tamo nalazi križni put). Zapadna prostorija je bila kuhinja sa stolnim ognjištem (kao i na Vrbovcu) u kojem je bilo puno keramike, životinjskih kostiju i ribljih ljuski. Istočna prostorija služila je za pohranu hrane. U prizemlju kule ustanovljen je sloj gorevine/požara u kojem je burg stradao. Unutar njega pronađeno je mnoštvo arheobotaničkih nalaza – puno gorenih žitarica pšenice i raži i to u jednakom omjeru, što ukazuje na pretpostavku da su žitarice bile pohranjene kao mješavina.

Na burgu Vrbovcu također su provedene arheobotaničke analize slojeva iz sjeverne prostorije, međutim, nisu pronađeni arheobotanički nalazi koji bi ukazivali na čuvanje žitarica. U flotiranom uzorku (U-33) nađeni su karbonizirani ostaci dviju vrsta korovno-ruderalnih biljaka: ptičji dvornik (*Polygonum cf. aviculare*) i ljekoviti sporiš (*Verbena officinalis*). To su biljke koje se javljaju kao korovi u dvorištima, uz putove, objekte/nastambe i slično. Drugih nalaza biljki u analiziranome uzorku nije bilo.<sup>9</sup>

Slično kao na Vrbovcu, između sjevernoga kompleksa i kule (no malo više uza zapadni zid i kulu) u dvorištu burga Dunkelstein nalazila se jama ukopana u živac, naknadno zatrpána otpacima. Prvotno je to bila jama za čuvanje

<sup>8</sup> Ukupna vjerojatnost 95,4%), odnosno cal AD 1052–1080 (vjerojatnost 6,7%), 1128–1132 (vjerojatnost 1,0%) i 1152–1222 (vjerojatnost 87,8%). Prema jednoj sigmi kalibracija je dala razdoblje cal AD 1165–1208 (vjerojatnost 68,3%).

Za kontrolu datacije taloženja ovih slojeva, predan je na analizu i uzorak ugljena (U-223) iz jednog od kulturnih slojeva (SJ 135) koji se nalazio između dvaju "sterilnih" slojeva te ostalih kulturnih slojeva. Analiza (KIA36566) je potvrdila razdoblje između datacija za najdonji sloj SJ 164 i gornji sloj SJ 91, odnosno BP 809±26 (dvije sigme – cal AD 1183–1270, vjerojatnost 94,4% i jedna sigma cal AD 1218–1257, vjerojatnost 68,3%).

<sup>9</sup> Analizu je obavila doc. dr. sc. Renata Šoštarić iz Botaničkog zavoda Prirodoslovno-matematičkog fakulteta Sveučilišta u Zagrebu.



Sl. 7 Burg Vrbovec, PN 259 – desna baza profilacije prozora s tragovima naknadnoga nasilnog oštećenja utora za ugrađivanje željezne rešetke (foto: T. Tkalčec)

Fig. 7 The castle of Vrbovec, SF 259 – the right base of a window moulding with traces of subsequent violent damage of the groove for the iron railing (photo: T. Tkalčec)

cinder, or the fire that destroyed the castle, was discovered in the ground floor of the tower. It contained a multitude of archaeobotanical finds – a lot of charred wheat and rye grains in equal proportion, suggesting that the cereals were stored as a mixture.

Archaeobotanical analyses of the layers from the northern room of the Vrbovec castle were carried out, but failed to yield archaeobotanical finds that would provide evidence of cereal storing. A flotation sample (S-33) yielded carbonized remains of two types of weed and ruderal plants: common knotgrass (*Polygonum cf. aviculare*) and common vervain (*Verbena officinalis*). These plants appear as weeds in courtyards, along the roads, structures/houses and the like. The analyzed sample contained no other vegetable finds.<sup>9</sup>

Similar to the situation at Vrbovec, between the northern complex and the tower (but a little higher up next to the western wall and tower), in the courtyard of the Dunkelstein castle there was a pit dug in the bedrock and subsequently filled up with refuse. It originally served for storing food, as interpreted on the basis of similar residential structures of central Europe. The abandonment of the pit, in the opinion of the manager of the investigation, should be viewed in the context of functional changes from a storage pit to built cellars, which takes place in the 12<sup>th</sup> cent.<sup>10</sup> Seven phases of construction were ascertained at Dunkelstein. The ceramic finds place the beginning of the life in the burg into 1100, and it lasted until the mid-13<sup>th</sup> cent., that is, in the second quarter of the 13<sup>th</sup> century the castle was destroyed in a fire. According to the author, in the first half of the 12<sup>th</sup> cent. the

<sup>9</sup> The analysis was carried out by Dr. Renata Šoštarić from the Institute of Botany, Department of Biology of the Faculty of Science in Zagreb.

<sup>10</sup> An interesting find at Dunkelstein are smaller rooms in the southern courtyard, behind the tower, archaeologically investigated and interpreted as workshops for making flax threads for weaving (the finds of two fireplaces, spindle whorls, as well as flax grains outside the rooms). The author assumes that a weaving loom was located in the suburbium, as pile-holes of irregular layout were found there.



Sl. 8 Burg Vrbovec, položaj ulomka prozora srednje veličine PN 183 *in situ* u sloju ruševine SJ 003 (foto: T. Tkalčec)

Fig. 8 The castle of Vrbovec, the position of a fragment of a medium-sized window SF 183 *in situ* in the debris layer SU 003 (photo: T. Tkalčec)

hrane, što je interpretirano na temelju sličnih naseobinskih struktura srednje Europe. Napuštanje jame, prema voditeljici istraživanja, treba promatrati u kontekstu funkcionalnih promjena od jama za pohranu do zidanih podruma, do čega dolazi u 12. st.<sup>10</sup> Na Dunkelsteinu je ustanovljeno sedam graditeljskih faza; prema nalazima keramike početak života na burgu datiran je u 1100. g., a traje do sredine 13. st., odnosno burg u drugoj četvrtini 13. stoljeća stradava u požaru. Prema autorici, burg je u prvoj polovini 12. st. predstavljao tip "klasičnoga plemićkog burga" sa središnjom kulom i izduženom četvrtastom stambenom zgradom, zatvoren poligonalnim prstenom. Ovakav oblik burga se na području jugoistočne Austrije učestalo susreće u tom razdoblju. Što se tiče graditeljskih faza, važno je napomenuti da je autorica razlučila prvu fazu u kojoj je podignuta kula 7,7 x 8 m, u funkciji vjerojatno stambene kule, s obodnim zidom debljine 2 m kao i na Vrbovcu. Prema K. Kühtreiber, prva je faza kratko trajala i odmah potom se na sjeveru gradi stambena zgrada (ne naziva je palasom jer arheološka iskopavanja nisu potvrdila postojanje visokoreprezentativne dvorane na katu) s kuhinjom na zapadu. Južno (vanjsko) lice stambene zgrade, prema dvorištu građeno je od finih pravilnih

<sup>10</sup> Zanimljiv nalaz na Dunkelsteinu predstavljaju manje prostorije u južnom dvorištu, iza kule, arheološki istražene i interpretirane kao radionice za izradu vlakana od lana za tkanje (nalazi dva vatrišta, pršljeni, a izvan soba ima nalaza lanenih sjemenki). Tkalački stan autorica pretpostavlja u suburbiju jer je tamo nađen ostatak nepravilno raspoređenih rupa od mosnica.

castle exhibited typical features of a "classical feudal castle" with a central tower and an elongated rectangular residential building, bounded by a polygonal ring. This form of a castle is frequently found in southeastern Austria in that period. When it comes to the construction phases, it is important to mention that the author distinguished the first phase, when the tower measuring 7,7 x 8 m was built, probably in the function of a residential tower, with a perimeter wall 2 m thick, same as at Vrbovec. According to K. Kühtreiber, the first phase was brief and immediately afterwards a residential building (she does not refer to it as a palace because archaeological excavation did not ascertain a highly representative hall at the upper floor) was erected at the north, with a kitchen at the west. The southern (exterior) face of the residential building, opening to the courtyard, was built of fine regular blocks, like the interior face of the Vrbovec tower, which is dated at Dunkelstein to the 12<sup>th</sup> century (Kühtreiber 2006, 150, Abb. 5). Fire and devastation were observed in phase 5, with arrowheads scattered all around, which points to a violent fire. Phase 6 exhibits traces of an attempt at a resumption of life in the burg, which did not take root. Certain interventions during the Baroque period were observed in phase 7.

Further parallels with Vrbovec are found in Slovakia, in the Medzianky castle (measuring 36 x 13–15 m), erected at the end of the 12<sup>th</sup> or at the turn of the 12<sup>th</sup> to the 13<sup>th</sup> cent., as well as in the Hungarian burg of Sztrahor, founded



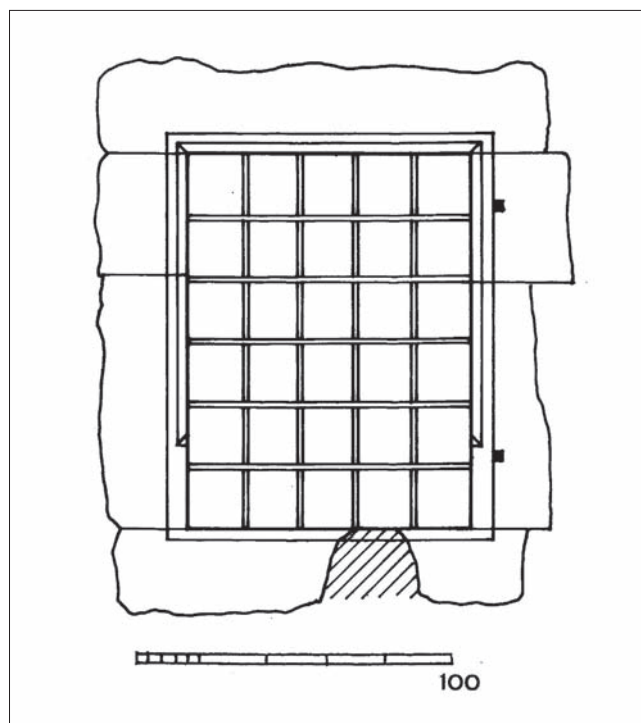
kvadara poput unutrašnjeg lica vrbovečke kule, što je na Dunkelsteinu datirano u 12. stoljeće (Kühntreiber 2006, 150, Abb. 5). U fazi 5 zamijećen je požar i stradavanje, posvuda su pronađene strelice što ukazuje na nasilno izazvan požar. U fazi 6, oko polovine 13. st., javlja se pokušaj obnove života na burgu koji nije zaživio. U fazi 7 zamijećene su neke intervencije tijekom baroka.

Sljedeće paralele Vrbovcu nalazimo u Slovačkoj u burgu Medzianky (veličine 36 x 13–15 m) koji je podignut krajem 12. st. ili na prijelazu 12./13. st. te u mađarskome burgu Sztrahor, nastalom između 1270. i 1295. godine (Feld 1993, 123). Oni su tlocrtno slični kako Vrbovcu tako i utvrdi u Paki (Šimek 2006, 134, slika). Razlika je u tome što su ti burgovi pravokutnog oblika. Palas je jednoprostan, položaj kule i cisterne isti je kao na Vrbovcu (Slivka 1990, 102, Abb.10.; Feld 1993, 128, Abb. 18.). Burg Medzianky je nastao na poticaj kralja, a u početku je bio u rukama ivanovaca (Slivka 1990, 89).

Takvu prostornu organizaciju nalazimo i u Češkoj u Vrchotovy Janovice, datiranoj dosta kasnije u 14. stoljeće. Raspored kule i nasuprot postavljeni palas gotovo je identičan, s tom razlikom što je na češkom primjeru palas sastavljen od četiri prostorije, jedne do druge u nizu (Durdík 2006, 7, 8, Abb. 4).

Daljnju paralelu Vrbovcu, odnosno tlocrtnoj dispoziciji objekata, nalazimo na burgu Rokštejn kod Panske Lhote u Moravskoj, koji također datira iz nešto mlađeg vremena. Dispozicija je gotovo identična, branič–kula, odnosno stambena kula na jugu (prizmatična kula 5,5 x 6,6 m), a na sjeveru je troprostorni palas. Veličina burga, odnosno ove jezgre slična je vrbovečkom – 21 x 19 m. Kula i obodni zid na kojeg je naslonjena, datirana je u zadnju četvrtinu 13. i prvu polovinu 14. st. Zapadno od kule arheološkim istraživanjem je pronađeno udubljenje u živcu sa slojem žbuke i gline na dnu – vjerojatno je to bio prvobitni drveni palas. Ulaz u burg bio je na istoku, okolo jezgre burga bila je graba, ulazilo se preko drvenog mosta i preko grabe. Južno se razvio suburbij. U drugoj polovini 14. stoljeća izgrađen je nešto veći obodni zid, odnosno udaljeniji od prvotnoga kako bi se povećala površina utvrde. U isto vrijeme datirano je podizanje troprostornog palasa (Kouřil et al. 2006, 30, Abb. 2; Měřínský, Zumpfe 2002, 9–11). Rokštejn je tijekom 14. st. te još u 15. stoljeću, za razliku od Vrbovca, doživio mnogo više dogradnji, pregradnji i popravaka. Na Vrbovcu još uvijek ne možemo govoriti o odnosu kule i obodnog zida jer to područje arheološki još nije istraženo. Ono što se može reći jest to da je palas (možda prvobitno dvoprostorni, možda i drugačije namjene) nastao istodobno s obodnim zidom. Naime, u zapadnoj prostoriji je uočeno kako je graditelj u prostoriji unaprijed planirao načiniti "police", odnosno kamene stolne plohe te je u skladu s takvim projektom gradio unutrašnje lice zapadnoga obodnog lica, koje je činilo zapadnu stijenu sjeverozapadne prostorije. Na tako oblikovan zid dozidan je u istoj fazi južni zid koji je dijelio prostoriju od dvorišta.

Prema strukturi stambenih objekata na burgovima 15. st., nad otkrivenim tlocrtom burga Vrbovca trebalo bi



Sl. 9 Varaždin, prozor kuhinje u prizemlju Staroga grada (crtež: Z. Horvat)

Fig. 9 *Varaždin, a kitchen window in the ground-floor of the Old Town (drawing: Z. Horvat)*

between 1270 and 1295. Their layout resembles Vrbovec as well as the fort in Paka (Šimek 2006, 134, figure). The difference is in the rectangular shape of these latter castles. The palace consists of a single room, and the position of the tower and cistern is the same as at Vrbovec (Feld 2004, 123). The castle of Medzianky was created upon the initiative of the king, and at first it was held by the Knights Hospitaller (Slivka 2004, 89).

Identical spatial layout is found also in the Czech Republic in Vrchotovy Janovice, dated much later in the 14<sup>th</sup> century. The layout of the tower and the palace facing it is almost identical, except that in the Czech example the palace consists of four rooms, in a sequence one next to the other.

A further parallel for Vrbovec, that is the ground-plan layout of the structures, is found at the Rokštejn burg near Panska Lhota in Moravia, also dating from a somewhat later period. The layout is almost identical, with a keep, or residential tower, at the south (a prismatic tower measuring 5,5 x 6,6 m), and a three-room palace at the north. The size of the burg, that is its core, is similar to Vrbovec – 21 x 19 m. The tower and the perimeter wall on which it leans, is dated to the period between the last quarter of the 13<sup>th</sup> cent. and the first half of the 14<sup>th</sup> cent. Archaeological investigation west of the tower discovered a depression in the bedrock with a layer of mortar and clay on the bottom – probably belonging to the original wooden palace. The entrance to the castle was at the east, the core of the castle was surrounded by a ditch, one entered the town over a bridge and the ditch. A suburbium developed to the south. In the latter half of the 14<sup>th</sup> century a somewhat larger perimeter wall





Sl. 10 Burg Vrbovec, ulomak horizontalnog šprljka "češkog prozora" PN 448 (foto: T. Tkalčec)

Fig. 10 The castle of Vrbovec, a fragment of a horizontal glazing bar of a "Bohemian window" SF 448 (photo: T. Tkalčec)

očekivati postojanje barem još dvije etaže, tj. I. i II. kat, s tim da je potkrovlje vjerojatno imalo obrambenu namjenu. Relativno mala tlocrtna površina palasa burga Vrbovca kao i značaj Celjskih, očito je vodila prema maksimalnom iskorištenju građevine, dakle, gradnja u visinu – s više etaža, koju može podnositi objekt ovako prilične debljine obodnog zida. I, konačno, brojnost i raznolikost ulomaka klesanaca prozora izravna su potvrda većeg broja prozora, znači i većeg broja prostorija, a time i broja etaža. Nažalost, u nas nije očuvano mnogo srednjovjekovnih palasa, no ipak se zna da su burgovi zbog relativno male površine građeni u visinu, a često su bili dvokatni. Očuvani su nam primjeri, npr. u Orahovici – burg Ružica, na burgu Velikom Kalniku, Garić–gradu, Grebengradu, veliki palas knezova Iločkih u Iloku. I kaštel knezova Celjskih u gradu Celju, izgrađen na relativno maloj površini, također je bio dvokatan i trokatan (Krempuš 2001, 35).

### 3. ARHITEKTONSKA PLASTIKA

U arheološkim istraživanjima registrirano je ukupno 127 kamenih posebnih nalaza koji su, manjim dijelom, izdvojeni kao obrađeni klesani kamen ili pak, većim dijelom, za koje je evidentno da su dijelovi okvira prozora ili vrata. Sav materijal je kartiran, a ovom prigodom tlocrtno se donose položaji svih, a istaknuti su položaji izabranih, u radu objavljenih pri-

was built at a distance from the original one, with the aim of enlarging the surface of the fort. The construction of the three-room palace dates from the same time (Kouřil et al. 2006, 30, Abb. 2; Měřínský, Zumpfe 2002, 9–11). In contrast to Vrbovec, Rokštejn underwent many more reconstructions, additions and repairs during the 14<sup>th</sup> cent. as well as in the 15<sup>th</sup> century. At Vrbovec we still cannot discuss the relationship of the tower and the perimeter wall, because this zone has not yet been investigated archaeologically. What we can say is that the palace (perhaps originally consisting of two rooms, which may have served a different purpose) was created simultaneously with the perimeter wall. It was observed in the western room that the architect's initial plan was to form "shelves" or stone table surfaces within the room, and that in line with that plan he constructed the interior face of the western perimeter wall, which formed the western side of the northwestern room. During the same phase, the southern wall that divided the room and the courtyard, was built abutting on that wall.

Considering the configuration of the residential structures on the 15<sup>th</sup>-century castles, we should expect at least two floors, i.e. the first and second floors, above the discovered ground plan of the Vrbovec castle. The attic probably served a defensive purpose. The relatively small layout surface of the palace of the Vrbovec castle, coupled with the



Sl. 11 Burg Vrbovec, PN 182 – "češki prozor" pronađen razmrvljen u mnoštvo ulomaka (foto: T. Tkalčec)

Fig. 11 The castle of Vrbovec, SF 182 – a "Bohemian window" preserved in a number of fragments (photo: T. Tkalčec)

mjeraka obrađenog kamena (plan 1). Klesani detalji izrađeni su iz mekog pješčenjaka koji je vrlo pogodan za obradu. Pojedini klesanci pronađeni su *in situ* usitnjeni u više dijelova. Vjerojatno je velikim dijelom do takvih oštećenja došlo zbog stradavanja u požaru, tj. uslijed visoke temperature koja je razorna djelovala čak sve do jezgre pješčenjaka, u kombinaciji s padom i urušavanjem te stoljetnoj izloženosti vlazi unutar zemlje i ruševine kojom su bili prekriveni. Pojedini su se, pak, klesanci već kod samoga urušavanja razdvojili te im dijelove ne nalazimo jedno pored drugoga već u krugu od nekoliko metara. Valja računati da je velik dio materijala pri padu otklizao niz strminu brijega te da u arheološkim istraživanjima nije ni pronađen. Također, jasno je kako su srednjovjekovni burgovi nakon svoje propasti tijekom kasnijih stoljeća predstavljali svojevrstne kamenolome okolnome stanovništvu. Stoga možemo pretpostaviti da je dio materijala i namjerno otpremljen i iskorišten u gradnji seoskih kuća, podruma, gospodarskih objekata pa i dvoraca. O naknadnim intervencijama na lokalitetu i o korištenju, tj. recikliranju građe sa srednjovjekovnog burga svjedoče i tragovi nasilnog oštećivanja pojedinih klesanaca radi uzimanja željeznih rešetki (kao kod PN 259, PN 273 i PN 426).

Ukupan je materijal pregledan, a za ovaj su rad izabrani ulomci koji su karakteristični nositelji kako funkcionalnih tako i databilnih značajki (Horvat Z. 1989; Horvat Z. 1992).

U dosadašnjem arheološki istraženom materijalu nisu pronađeni ulomci, detalji ili profilacije romaničkih, odno-

importance of the Counts of Celje, obviously resulted in a maximum efficiency of the building, i.e. building in height – with several floors, corresponding to the carrying capacity of a structure with a perimeter wall of such considerable thickness. And finally, the number and variety of fragments of dressed stone from the windows are a direct evidence for a larger number of windows, and consequently also of several rooms as well as floors. Unfortunately, not many mediaeval palaces have been preserved in Croatia. It is nevertheless known that due to a relatively small surface the castles were built in height, and were also two-storeyed. There are preserved examples in Orahovica – the Ružica castle, the Veliki Kalnik burg, Garić-Grad, Grebengrad, grand palace of the Dukes of Ilok in Ilok. The castle of the Counts of Celje in the town of Celje, built on a relatively small surface, was likewise two- and three-storeyed (Krempuš 2001, 35).

### 3. ARCHITECTURAL STONEMWORK

A total of 127 special finds of stone have been registered in the archaeological investigations. A smaller part were distinguished as dressed stone, while the majority obviously belonged to door and window frames. All the finds were mapped, and here we provide a ground plan with the position of each find, with highlighted positions of selected pieces of dressed stone that are published in the paper (Plan 1). Carved details were made of soft sandstone suitable for working. Several pieces of dressed stone were found *in situ*, broken into several fragments. Damage of this type most likely occurred due to exposure to fire, i.e. high temperature that had a devastating effect even to the sandstone core, in combination with collapse and century-long exposure to humidity within the ground and debris they were covered with. In some cases the stone split at the moment of collapse and parts thereof are found not one next to the other but within a radius of several metres. One should also reckon with the fact that a lot of material slid down the hill slope upon the collapse, and consequently was not found in the archaeological investigations. Moreover, it is clear that in the centuries following the collapse of mediaeval castles they represented stone quarries of sorts for the surrounding population. We can therefore assume that part of the material had been deliberately shipped and used in the building of village houses, cellars, economic facilities and even castles. A telltale signature of subsequent interventions on a site and of the use or recycling of the material from a mediaeval castle are traces of violent damaging of dressed stones in order to take hold of iron bars (as in the case of SF 259, SF 273 and SF426).

We analyzed the entire material and selected for this paper those fragments that exhibit characteristic functional and date-sensitive features (Horvat Z. 1989; Horvat Z. 1992).

No details or mouldings with a Romanesque or Romanesque-Gothic stylistic features have been found within the archaeological material discovered so far, with the obvious exception of the already mentioned parts of the walls of the castle. The discovered architectural stonework exhibit





Sl. 12 Ilok – palača Odescalchi, nekadašnji palas knezova Iločkih, južno pročelje II. kata (foto: Đ. Šimičić)

Fig. 12 Ilok – Odescalchi palace, former palace of the Dukes of Ilok, southern façade of the 2nd floor (photo: Đ. Šimičić)

sno romaničko–gotičkih stilskih značajki, osim naravno već spomenutih dijelova samog ziđa burga. Pronađeni ulomci arhitektonske plastike imaju značajke arhitekture doba nakon 1400. godine, tj. nastali su u prvim desetljećima 15. st. To su dijelovi prozora različita stupnja obrađenosti te manji broj dovratnika. Tek se za nekoliko ulomaka ne može sa sigurnošću reći čemu su pripadali, odnosno kakav je bio detalj arhitekture od kojeg potječu, međutim, i ti ulomci stilski jasno ukazuju na spomenuto razdoblje.

### 3.1. PROZORI

Pronađeni ulomci arhitektonske plastike prozora potječu od tri tipa prozora, različita značaja, veličine i namjene. U iskopavanjima pronađeni ulomci stakla govore pak da su neki prozori bili ustakljeni. Svi su prozori imali željezne rešetke, osim, možda onih najmanjih. Gotovo svi nađeni dijelovi doprozornika su ulomci, osim nekoliko dijelova malih prozora, što možda može biti i posljedica rušenja zidova zbog recikliranja kamenog materijala. Međutim, druga je mogućnost da se kamen slomio u više komada pri padu te da će se, nakon osiguranja odgovarajućeg prostora za takav rad, iz mnoštva ulomaka moći rekonstruirati nekoliko cjelovitih prozora.<sup>11</sup>

U radu se opisuju tipovi prozora kakvi su nekada bili na burgu Vrbovcu, prema njihovim stilskim i građevnim značajkama. Napomenimo da je ovaj objekt imao i obrambena obilježja, tako da su prozori u nižim etažama morali biti malih otvora i nije ih niti trebalo biti mnogo, dok se gornje

features of architecture after 1400, i.e. they were created in the first decades of the 15<sup>th</sup> cent. These are window pieces in various degrees of finish, and a few door jambs. Only in a few cases the fragments cannot be attributed to a specific element, that is, the architectural piece they belonged to. Nevertheless, these fragments stylistically also clearly point to the mentioned period.

### 3.1. WINDOWS

The discovered stone window fragments belong to windows of three types, of various importance, size and function. Finds of glass from the excavations indicate that some windows were glazed. Each window had iron railings, except perhaps the smallest ones. Almost all discovered pieces of window jambs were fragments, except for several pieces of smaller windows, which might be a consequence of collapse of windows due to stone quarrying.<sup>11</sup>

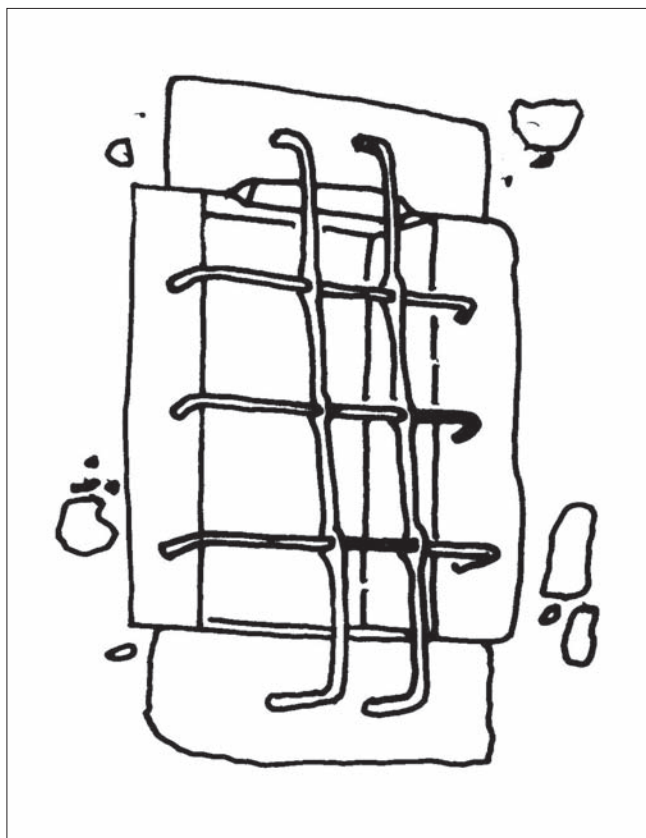
The paper describes the types of windows formerly present at the Vrbovec castle, with its stylistical and architectural features. Let us mention that this structure had also defensive features, so that the windows at lower floors had to be narrower and few, while the upper storeys, i.e. the first and second floors, had increasingly larger windows. This logic is perceptible also on the discovered fragments, which provided the basis for the shapes we put forward here.

Some of the discovered window fragments exhibit traces of yellow (ochre) and white paint, as alternating strips on the façade. The borders between the colours were deli-

11 Kameni materijal je danas pohranjen u Dvoru Veliki Tabor. Dio kamene građe na kojoj je bila očuvana žbuka otpremljen je u Hrvatski restauratorski zavod kako bi se žbuka restaurirala i konsolidirala. Materijal je za potrebe ovoga članka pregledan u skućenim uvjetima, u kuli Dvora Veliki Tabor u kojem su u tijeku veliki radovi obnove. Potrebno je osigurati primjeren prostor u kojem bi se svi nalazi, prema terenskoj arheološkoj dokumentaciji, pokušali spojiti te, naravno, financijska sredstva za njihovo lijepljenje i restauraciju, jer to nije moguće učiniti iz vrlo skromnih sredstava kojima arheolozi raspolazu za arheološka iskopavanja, a kojima je ujedno obavljena i konzervacija svih zidova na terenu te konzervacija svih do sada istraženih metalnih predmeta.

11 Stone material is presently kept in the Veliki Tabor castle. A part of the stones with preserved traces of mortar were transported to the Croatian Restoration Institute for restoration and consolidation of the mortar. For purposes of this paper the material was examined in cramped conditions in the tower of the Veliki Tabor castle, which is currently undergoing extensive reconstruction works. It is necessary to provide an appropriate working space in which all the finds would be joined in keeping with the archaeological documentation, as well as to secure financial means for joining and restoration thereof, as it is not possible to do that with the very modest means available to archaeologists for archaeological excavations, which were at the same time used for conserving all the walls at the site and all the so far discovered metal objects.





Sl. 13 Zrin, pokušaj rekonstrukcije košaraste rešetke na manjem prozoru (crtež: Z. Horvat)

Fig. 13 Zrin, a reconstruction of a basket-shaped railing on a smaller window (drawing: Z. Horvat)

etaže, dakle I. i II. kat, razrahljuju sve većim otvorima. Ova je logika zastupljena i na pronađenim ulomcima pa je prema tome i predloženo njihovo oblikovanje.

Neki od pronađenih ulomaka prozora pokazuju tragove bojanja pročelja žutom (oker) i bijelom bojom, kao naizmjenične trake na pročelju. Granice među bojama bile su određene crtom, uparanom u žbuku poput PN 426, PN 427 i PN 449 (sl. 6). Ovaj nalaz je vrlo značajan, jer govori da je burg Vrbovec imao oslikana pročelja, što je jedinstven nalaz na burgovima 15. st. u nas.

### 3.1.1. Manji prozori (T. 1)<sup>12</sup>

Manji prozori, ukošena ruba okvira, mogli su osvjetljavati pomoćne prostorije kao spremišta, radne prostorije, stubišta, zahode i sl. Međutim, je li ih bilo i u prizemlju, u vanjskim zidovima – ne znamo. Zbog mala svijetla otvora, ovi prozori nisu uvijek imali željeznu rešetku, ponekad tek jednu okomitu šipku.

Tipične primjere manjih prozora predstavljaju ulomci PN 184, pronađen u zapadnoj prostoriji te PN 227, pronađen u sjevernoj prostoriji (plan 1). Ulomak jednostavnog prozora PN 184 potječe vjerojatno s neke od pomoćnih prostorija. Na ležajnoj plohi urezan je klesarski znak, nalik slovu "V" (T. 1:1). U špaletu je doprozornika ubušena rupa promjera 15

mited by a line in the mortar, such as in the case of SF 426, SF 427 and SF 449 (Fig. 6). This is a very important find, as it reveals that the Vrbovec castle had painted façades, which is a unique find on the 15<sup>th</sup>-century castles in Croatia.

#### 3.1.1.1. Small-sized windows (Pl. 1)<sup>12</sup>

Smaller windows, with a beveled frame edge, could lighten accessory spaces such as storages, working rooms, staircases, privies etc. However, we do not know whether there had been any at the ground floor and within the outer walls. As the light opening was narrow, these windows sometimes lacked the iron railing and had only a vertical bar instead.

Typical examples of small-sized windows are fragments SF 184, discovered in the western room, and SF 227, found in the northern room (Plan 1). A fragment of a simple window SF 184 probably belonged to an accessory room. A carver's symbol resembling the letter "V" was carved on the back surface (Pl. 1:1). A hole 15-mm in diameter was drilled into the frame of the window jamb, probably for the closing mechanism of a casement. A fragment of a simple window SF 227 has similar features (Pl. 1:2).<sup>13</sup> The edge of the frame of both fragments is beveled, and they have a groove for a casement on the inside. Since these fragments have complete elements of a frame, both most likely stood at the sides, and the bevel was present on all four sides of the frame. No traces of a built-in iron railing are visible. The stone used is a soft and easily worked sandstone, with a smoothed surface.

The type of window frame with beveled edges on all four sides appears with the Bohemian influences at the beginning of the 15<sup>th</sup> cent., but the moulding itself is typical for the 15<sup>th</sup> cent. (Horvat Z. 1997, 44–49).

Frames of small, simple windows with beveled edges are in fact a form present throughout the Gothic period, albeit in variants typical of specific phases (Fig. 2). In Croatia it is present already in the mid-13<sup>th</sup> cent. at the Popov Toranj tower (*Priest's Tower*) in the walls of the Gradec of Zagreb (Horvat Z. 1997, 45). The proportions of exterior light openings vary considerably from one building to another. A niche with a segmented lintel and widening towards the interior is regularly formed on the inside of the wall (Fig. 3). Niches were formed either at the parapet level or at the floor level, which was necessary if one wanted to access the window. If necessary, windows were closed with shutters, mostly wooden, for which they had a groove on the inside – this is also the case here (Fig. 4). Our windows – several fragments have been found – match the type of small windows with a beveled frame on all four sides, which are dated during the entire 15<sup>th</sup> cent. (Fig. 2–C). It is characteristic that the excavated pieces of window frames were whole, unbroken, which suggests that the openings were so narrow that no railing was needed or had one built-in vertical bar only.

<sup>12</sup> All the drawings were made by PhD Zorislav Horvat.

<sup>13</sup> A possible position of each fragment is depicted on the plates in the upper right corner, where it was possible, for each fragment separately.

<sup>12</sup> Sve crteže je izradio dr. sc. Zorislav Horvat.

mm, vjerojatno za uređaj za zatvaranje krila. Ulomak jednostavnog prozora PN 227 ima slične značajke (T. 1:2)<sup>13</sup>. Rub okvira im je ukošen, a s unutrašnje strane imaju utor za krilo. S obzirom da ovi ulomci imaju cjelovite elemente okvira, najvjerojatnije su oba stajala postrance, a ukošenje ruba im je teklo na sve četiri strane okvira. Nema tragova ugradnje željezne rešetke. Kamen je meki pješčenjak, povoljan za obradbu, glatko obrađene površine.

Tip prozora sa sve četiri strane okvira ukošenog ruba javlja se kod čeških utjecaja početkom 15. st., međutim, sama je profilacija tipična za čitavo 15. st. (Horvat Z. 1997, 44–49).

Okviri malih, jednostavnih prozora s ukošenim rubom ustvari su oblik koji traje čitavo vrijeme trajanja gotike, iako u varijantama, tipičnim za pojedina razdoblja (sl. 2). U nas ga nalazimo već sredinom 13. st. na Popovu tornju na utvrđama zagrebačkoga Gradeca (Horvat Z. 1997, 45). Proporcije vanjskih, svijetlih otvora na izvedenim građevinama dosta variraju. Na unutrašnjoj je strani zida redovito izvedena niša, koja se širi prema unutra te je bila presvođena segmentnim nadvojem (sl. 3). Niša je bila izvedena bilo u visini parapeta, bilo da je sezala do poda, što je bilo potrebno ako se htjelo pristupiti prozoru. Prozori su prema potrebi bili zatvarani prozorskim krilima, najčešće drvenim, i za to su imali na unutrašnjoj strani utor za smještaj krila – što je i ovdje slučaj (sl. 4). Naši prozori – nađeno ih je nekoliko ulomaka – odgovaraju tipu malih prozora sa ukošenjem na sve četiri strane otvora, koji se datiraju tijekom čitavog 15. st. (sl. 2–C). Karakteristično je da su iskopani dijelovi okvira čitavi, nerazbijeni, po čemu se može zaključiti kako su otvori bili toliko uski da rešetka nije bila potrebna ili je bila ugrađena samo jedna okomita šipka.

### 3.1.2. Prozori srednje veličine (T. 2 – T. 5)

Ovakvih je ulomaka okvira prozora bio veći broj, s različitim pojedinostima, tako da se može pretpostaviti kako ih je bilo više, moguće i raznih veličina otvora, a naročito zato jer je zamijećeno nekoliko inačica profilacije. Ovi su ulomci imali utore za vanjsko i unutrašnje krilo te rešetku unutar svijetlog otvora prozora<sup>14</sup>.

Tipične primjere prozora srednjih veličina predstavljaju ulomci pronađeni u dvorištu burga PN 183, PN 258/1,2, PN 259, PN 261, PN 262, PN 264, PN 273 te oni izvan jezgre burga PN 426 i PN 427 (plan 1).

Profilacije se međusobno tek ponešto, minimalno razlikuju, ali ima i ponekih razlika koje govore o pripadnosti različitim prozorima.

Ulomci PN 264 i PN 426 odgovaraju lijevoj (gleda li se prozor izvana) bazi profilacije doprozornika (T. 2:1–2). Osim toga, baza im nije iste visine, dakle, radi se o dva različita prozora, o čemu svjedoči i mjesto njihova nalaza – PN 264 je

<sup>13</sup> U tablama je u gornjem desnom uglu prikazana moguća pozicija ulomka, tamo gdje je to bilo moguće, i to za svaki ulomak zasebno.

<sup>14</sup> Rešetke na većim prozorima stambenih prostorija znalo se stavljati s vanjske strane zida, tako da su stršale izvan plohe pročelja, tj. imale su košarasti oblik.



Sl. 14 Burg Vrbovec, ulomak vanjske prozorske klupčice PN 166 *in situ* (foto: T. Tkalčec)

Fig. 14 Vrbovec castle, a fragment of an exterior stone bench SF 166 *in situ* (photo: T. Tkalčec)

### 3.1.2. Medium-sized windows (Pl. 2 – Pl. 5)

A number of fragments of such windows were found, with various details, allowing us to assume that there were several windows, whose openings may have varied in size, all the more so as several variants of mouldings were observed. These fragments had grooves for exterior and interior casements and a railing within the light opening of the window<sup>14</sup>.

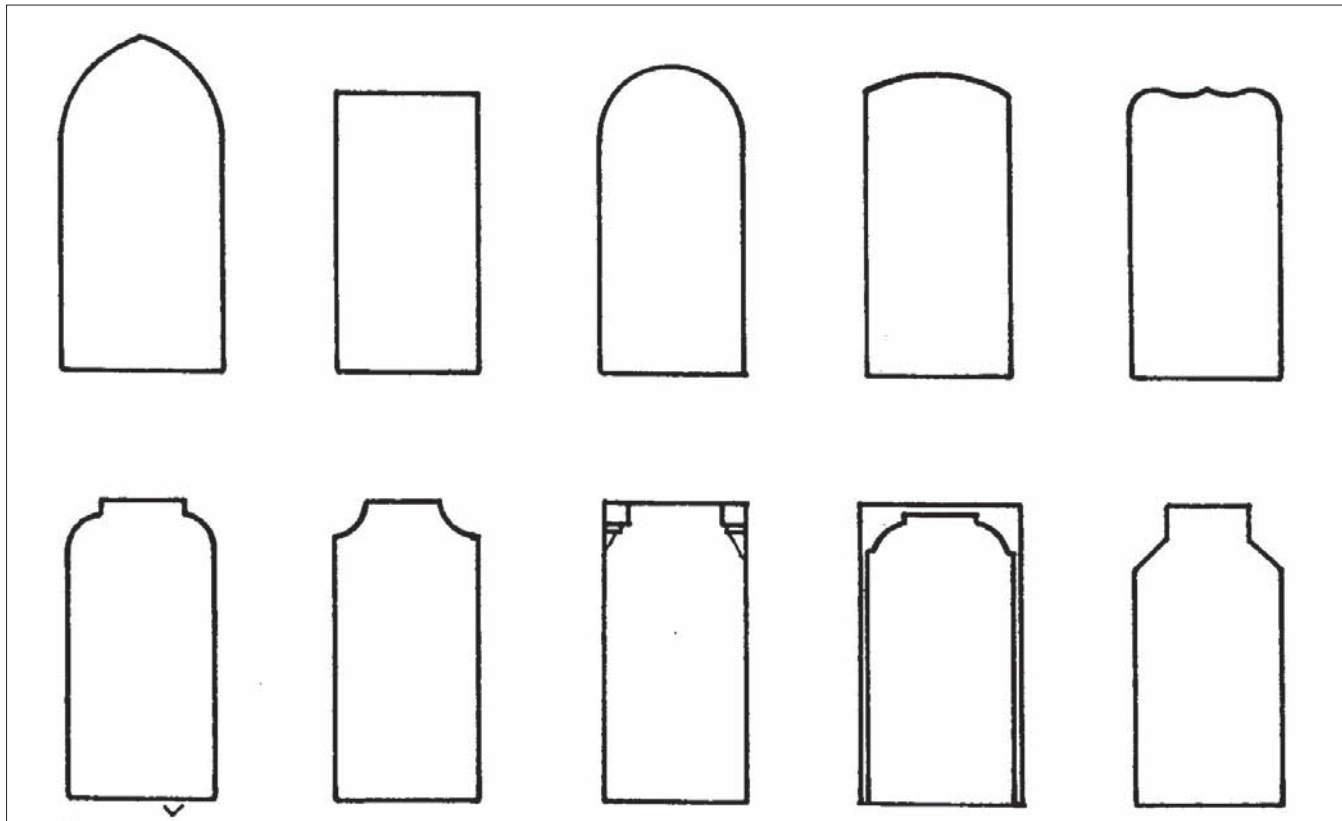
Typical examples of medium-sized windows are fragments discovered in the burg courtyard SF 183, SF 258/1,2, SF 259, SF 261, SF 262, SF 264, SF 273 as well as those outside the core of the castle SF 426 and SF 427 (Plan 1).

Mouldings differ from each other only in a minimum of details, but certain differences indicate that they belonged to different windows.

Fragments SF 264 and SF 426 belong to the left (when looked from the outside) base of the window jamb moulding (Pl. 2:1–2). Besides, the bases are not of the same height, indicating that they belong to two different windows, as corroborated by the spot of their discovery – SF 264 was discovered in the burg courtyard, while SF 426 was found outside the burg core, east of the northeastern room of the palace (Plan 1, Fig. 5). Fragment SF 426 is particularly interesting due to traces of white and ochre paint on the façade. The window formerly had a built-in iron railing, which was removed by force (Pl. 2:2, Fig. 6).

Fragments SF 273 and SF 259 share identical features (Pl. 3:1–2). At the same time, they exhibit traces of forceful removal of the iron railing (Fig. 7). A carver's mark resembling the letter "Y" was carved into the upper back surface of SF 273 (Pl. 3:1). As both pieces belonged to a right window ba-

<sup>14</sup> Railings on larger windows of residential quarters were sometimes placed on the outside of the wall, so that they protruded outside the façade plane, i.e. they were basket-shaped.



Sl. 15 Uobičajeni oblici okvira vratiju tijekom srednjeg vijeka (13. – početak 16. stoljeća) (Horvat Z. 2002)  
 Fig. 15 Customary forms of door frames during the Middle Ages (13th–beginning of the 16th century) (Horvat Z. 2002)

pronađen u dvorištu burga, dok je PN 426 pronađen izvan jezgre burga, istočno od sjeveroistočne prostorije palasa (plan 1, sl. 5). Ulomak PN 426 je posebno zanimljiv zbog tragova bojanja pročelja bijelom i oker bojom. Prozor je nekada imao ugrađenu željeznu rešetku, koja je nasilno izvađena (T. 2:2, sl. 6).

Ulomci PN 273 i PN 259 imaju iste značajke (T. 3:1–2). Ujedno, na njima se naziru tragovi nasilnog uzimanja željezne rešetke (sl. 7). U gornju ležajnu plohu PN 273 urezan je klesarski znak nalik slovu "Y" (T. 3:1). Kako su oba primjerka bila desne baze prozora, radi se o dva različita prozora. PN 259 je, kao i PN 258, pronađen u dvorištu, južno od južnog zida palasa, na liniji razmeđe sjeverozapadne i sjeverne prostorije, dok je PN 273 pronađen oko 2,5 metara istočnije (plan 1). Baze na oba ulomka nisu na istoj visini, kao kod PN 264 i PN 426. Dakle, radi se o tri do četiri različita prozora koji su mogli biti iste ili približno iste veličine, s izuzetkom PN 264 koji je mogao biti nešto manjeg svijetlog otvora. Ulomak PN 426 mogao bi potjecati s prozora iste veličine kao PN 273 i PN 259, teoretski je čak mogao biti i par jednoj od te dvije desne baze profilacije, iako je pronađen istočno izvan jezgre burga (sl. 5). Iste je profilacije kao ulomci PN 259, PN 273, PN 426 i necjeloviti ulomak PN 427, no veće je debljine doprozornika. Dakle, radi se o još jednom, trećem prozoru slične profilacije. Unatoč blizini pronalaska, ne može se sa sigurnošću ustvrditi da su PN 426 i PN 427 dijelovi istoga prozora.

se, they undoubtedly belong to two different windows. SF 259, same as SF 258, was found in the courtyard, south of the southern wall of the palace, at the dividing line between the northwestern and northern rooms, while SF 273 was found around 2,5 metres to the east (Plan 1). The bases of both fragments have different heights, like in the case of SF 264 and SF 426. This means that we deal with three or four different windows, which may have been of a similar or approximately equal height, with the exception of SF 264, whose light opening was probably smaller. Fragment SF 426 perhaps belonged to a window of equal size as SF 273 and SF 259. In theory, it may even be associated with one of those two right moulding bases, even though it was found at the east outside the core of the castle (Fig. 5). Its moulding is the same as fragments SF 259, SF 273, SF 426 and the incomplete fragment SF 427, but its window jamb is thicker. Even though they were discovered near each other, it cannot be ascertained that SF 426 and SF 427 were parts of the same window.

Fragments of the stone frame of window SF 258 have quite damaged mouldings, without any characteristic features. Nevertheless, considering the spot of discovery, they undoubtedly form part of the same window as SF 259 (Pl. 4:1).

Fragment SF 183, from a stone frame of a medium-sized window, formerly with a railing within the opening, may have had an outer and interior casement. A carver's mark was incised on the back surface, like on SF 184. Instead of a groo-





Sl. 16 Burg Vrbovec, dijelovi okvira vrata – lijevo PN 190, u sredini PN 187, gore PN 186 (foto: T. Tkalčec)

Fig. 16 Vrbovec castle, fragments of a door frame – left SF 190, centre SF 187, above SF 186 (photo: T. Tkalčec)

Ulomci kamenog okvira prozora PN 258 prilično su oštećene profilacije, bez nekakvih karakterističnih obilježja, no zasigurno predstavljaju, s obzirom na mjesto nalaza, dio istog prozora kao i PN 259 (T. 4:1).

Ulomak kamena okvira prozora srednje veličine PN 183, nekada s rešetkom unutar otvora, mogao je imati vanjsko i unutrašnje krilo. Na ležajnoj plohi urezan je klesarski znak kao kod PN 184. Umjesto užljebine, PN 183 ima kosinu, a debljine je 25,5 cm, kao i ulomci PN 426 i PN 273. Ulomak PN 183, međutim, ne može biti dio tih prozora, već nekog drugog, koji je ipak imao drukčije oblikovanje, bez užljebine, dakle prozora jednostavnijeg oblikovanja (sl. 8, T. 4:2).

Ulomci PN 261 i PN 262 dijelovi su natprozorne grede (gornji desni kut, gledano izvana), no odviše su oštećeni i necjeloviti pa nije moguće odrediti pripadaju li kojem od već spomenutih ulomaka (usporediti rasprostranjenost ostalih ulomaka – plan 1). Na njima nema tragova ugradbe željezne rešetke, no s obzirom na oštećenja s donje strane, prozori su mogli imati rešetku (T. 5: 1–2).

Sagledamoli sve ove ulomke premanjihovim značajkama i mogućim pripadnostima, prozora srednjih veličina moglo je biti 5–6, no naravno, to ne znači da ih nije moglo biti i više. Prema mjestu nalaza – većinom u dvorištu, ispred južnoga zida palasa, mogli su biti ugrađeni u taj zid, vjerojatno na višim etažama.

Utor s vanjske strane prozora govori o vjerojatnosti da je bio providen s vanjskim kapkom (nije poznato jednokrlnim ili dvokrlnim). Vanjski su drveni kapci služili prije svega za zaštitu unutrašnjih, najvjerojatnije ostakljenih krila, a u neku ruku i za obranu. Više ulomaka ima naznačenu bazu, tj. profilacija je zaustavljena na nekoj visini iznad prozorske klupčice.

Primjere ovakvog tipa prozora, prozore srednjih veličina nalazimo, primjerice, na burgovima Samoboru, Valpovu, Ozlju, Đurđevcu, Brinju, kaštelu u Ogulinu i Starom gradu u Varaždinu (sl. 9). Iza prozora nalazila se opet niša, koja je sezala vjerojatno do poda, dok su unutar niše mogle biti ugrađene kamene klupe. Takvi su prozori imali prilično jaku



Sl. 17 Burg Vrbovec, pronalazak spolije PN 181 i neposredno do nje "češkog prozora" PN 182 (foto: T. Tkalčec)

Fig. 17 Vrbovec castle, a find of spolia SF 181 and adjacent to it a "Bohemian window" SF 182 (photo: T. Tkalčec)

ve, SF 183 has a bevel. It is 25,5 cm thick, like fragments SF 426 and SF 273. However, fragment SF 183 did not belong to these windows but to another one, which was moulded differently, without a groove, i.e. it was a window of a simpler shape (Fig. 8, Pl. 4:2).

Fragments SF 261 and SF 262 belonged to a window lintel (upper right corner, looked from the outside), but they are too damaged and incomplete, which renders it impossible to ascertain whether they belonged to any of the aforementioned fragments (compare distribution of the remaining fragments – Plan 1). No trace of iron railing were found on them, but in view of the damage on the bottom, the windows may have had a railing (Pl. 5: 1–2).

If we consider all these fragments according to their features and possible affiliations, there may have been 5–6 medium-sized windows. This, naturally, does not mean that there may not have been more. Judging by the place of discovery – mostly in the courtyard, in front of the southern wall of the palace, they were possibly built into the wall, probably on the higher floors.

The groove on the outer side of the window suggests that it was probably furnished with an exterior casement (whether single or double it is not known). The outer wooden casements served primarily for the protection of the interior, in all likelihood glazed panes, and in a way also for defence. Several fragments have a prominent base, i.e. moulding stops at certain height above the window bench.

Examples of medium-sized windows are found on the castles of Samobor, Valpovo, Ozalj, Đurđevac, Brinje, the castle in Ogulin and Old Town Varaždin (Fig. 9). Another niche was situated behind the window. It probably reached the floor, while inside the niche there may have been built-in stone benches. Windows of this type had a fairly substantial moulding, and may have been of the "Bohemian" type, with glazing bars. However, not one fragment that would corroborate this assumption has been found at that place. Besides, the "Bohemian windows" would not have had a railing



Sl. 18 Burg Vrbovec, pronalazak okvira manjeg prozora PN 447 (foto: T. Tkalčec)  
 Fig. 18 Vrbovec castle, a find of a frame of a smaller window SF 447 (photo: T. Tkalčec)

profilaciju pa su mogli biti i "češki", sa šprljcima, no do sada nije na tom mjestu pronađen niti jedan ulomak koji bi potvrdio ovu mogućnost. Osim toga, "češki prozori" ne bi imali rešetku unutar svijetla otvora prozora.

### 3.1.3. Prozori sa šprljcima ("češki prozori"<sup>15</sup>) (T. 6, T. 7)

Prozorima sa šprljcima, tzv. "češkim prozorima" pripadaju ulomci PN 448, PN 450, PN 193–197, PN 182 te ulomak vanjske prozorske klupčice PN 166.

Nađena su dva ulomka šprljaka identične, a složenijske profilacije – PN 448 i PN 450. Ulomci su nađeni s istočne strane palasa te se može pretpostaviti da se prozor nalazio na toj strani. PN 448 je ulomak križanja kamenih šprljaka "češkog prozora", odnosno horizontalni šprljak ("antena") koji je imao nesimetričnu profilaciju (sl. 10, T. 6:1). Unutrašnja strana ulomka je oštećena, no prema ulomku PN 450, iste profilacije, šprljak nije straga imao utor za krilo (T. 6:2). Prikaz položaja ulomka PN 448, predstavljen na T.6:1 – dolje desno, dan je na crtežu očuvana prozora na palasu Nikole Zrinskog, zvanom i "Žitnica", u Ozlju. Taj je prozor nekada imao izvana i prozorsku klupčicu, no ona je otklesana ti-

<sup>15</sup>"Češki prozori" su tako nazvani, jer ih je u srednjoj Europi prvi počeo primjenjivati Petar Parler na gradilištima Karla IV. Luksemburgovca. Kasnije, oko 1400. godine, nakon raspuštanja praških radionica, majstori ih raznose po cijeloj srednjoj Europi, pa i kod nas.

inside the light opening of the window.

### 3.1.3. Multi-paned windows ("Bohemian windows"<sup>15</sup>) (Pl. 6, Pl. 7)

Multi-paned windows, the so-called "Bohemian windows" are represented by fragments SF 448, SF 450, SF 193–197, SF 182 and a fragment of the small exterior window bench SF 166.

Two fragments of a junction of stone mullion and transom of identical and more complex moulding were found – SF 448 and SF 450. The fragments were found at the eastern side of the palace, and it can be assumed that this was the position of the window. SF 448 is a fragment of a junction of stone mullion and transom of a "Bohemian window", that is, a horizontal transom ("antenna"), of asymmetrical moulding (Fig. 10, Pl. 6:1). The interior part of the fragment is damaged, but a comparison with fragment SF 450, which had a same moulding, reveals that the transom or mullion lacked a groove for the casement on the back (Pl. 6:2). Fragment SF 448 on Pl. 6:1 – bottom right, is depicted on a drawing of a preserved window on the palace of Nikola Zrinski in Ozalj, also known as "Granary". This window once had a

<sup>15</sup>"Bohemian windows" were named so because Peter Parler was the first in central Europe to apply them on the constructions of Charles IV of Luxembourg. Later, around 1400, after the Prague workshops closed down, the master builders started distributing them all over central Europe, including Croatia.



jekom 18. st.

Ulomci PN 193–197 (radi se o prilično razdrobljenu ka-menu, čijih se pet dijelova spaja) mogli su stajati na jednoj od dviju bočnih dijelova doprozornika, najvjerojatnije “češkog prozora” (T. 7:1). Očuvana je ležajna ploha pa se može pretpostaviti kako je položaj ulomka uz gornje lijevo okno, gledano izvana. Prozor je imao utor za krilo na unutrašnjoj strani. Nalaz unutar srednje prostorije prizemlja palasa dopušta pretpostavku da mu je mjesto moglo biti i na sjevernom i na istočnom pročelju.

Još je jedan primjer “češkog prozora” PN 182, usitnjelog u mnoštvo komada, pronađen u sjevernoj prostoriji nedaleko PN 193–197 (sl. 11 i sl. 17). Identične je i profilacije te možda predstavlja dio istoga okvira prozora, a potvrđuje pretpostavku da je sjeverno i istočno pročelje bilo raščlanjeno takvim, bogato ukrašenim prozorima.

Češki prozori redovito su bili ostakljeni, što na Vrbovcu potvrđuju nalazi ulomaka prozorskog stakla, a osvijetljavali su prostorije za reprezentaciju i stambene prostorije, kao što su to primjeri prozora na palasu knezova Iločkih u Iloku, otkriveni tijekom radova na sanaciji 2000. godine, a nedavno i obnovljeni (sl. 12). Iza ovakvih bi se prozora očekivala izvedba kamenih klupa za rad pri danjem svijetlu (Horvat Z. 1997, 52–57). Iako nije nađeno više velikih ulomaka koji bi nam mogli dati dovoljno informacija o njihovom izgledu i opremi, ipak se može s dosta sigurnosti pretpostaviti da su s vanjske strane imali košarastu željeznu rešetku koja je omogućivala naginganje kroz prozor i bolji pregled okolice (sl. 13). Rešetka je značila i da su se krila prozora otvarala prema unutra. S vanjske strane bila je uobičajena izvedba konzolne kamene klupčice, kao dio donjeg dijela doprozornika, čemu bi odgovarao jedan od nađenih ulomaka s Vrbovca – PN 166.

PN 166 je ulomak prozorske klupčice možda kojeg “češkog prozora”, pronađen u dvorištu, uz južni zid sjeverne prostorije te on svjedoči o boljoj opremljenosti prozora ovog burga (sl. 14, T. 7:2 – desno crtež erкера s Kaštela u Pazinu pokazuje mjesto klupčice tamošnjega “češkog prozora”). Neobično je to što je pronađen na prostoru gdje su uglavnom pronađeni prozori srednjih veličina. Postoji stoga, naravno, mogućnost kako je pripadao upravo jednome od tih prozora, a možda je na to mjesto dospio i sekundarno nakon pada, tj. urušavanja zidova, tijekom uzimanja kamena od strane lokalnih mještana u nekom razdoblju ranoga novog vijeka.<sup>16</sup>

Zanimljivo je da jedan “češki prozor” (PN 448 i PN 450), pronađen izvan jezgre burga na padini istočno od sjeveroistočne prostorije, s unutrašnje strane nije imao utor za krilo. Takav je slučaj i na inače vrlo bogato opremljenom palasu burga Brinje s početka 15. st.; niti tamo “češki

small window bench on the outside, but it was carved off during the 18<sup>th</sup> cent.

Fragments SF 193–197 (the stone is quite crumbled, with five pieces that can be conjoined) may have stood on one of the two lateral sides of the window jamb, in all likelihood a “Bohemian window” (Pl. 7:1). The back surface is preserved, so it can be assumed that the fragment was positioned next to the upper left pane, when looked from the outside. The window had a casement groove on the inside. A find within the central room of the ground-floor of the palace allows the assumption that it may have been on the northern or the eastern façade.

Another example of a “Bohemian window”, SF 182, fragmented in a number of pieces, was found in the northern room not far from SF 193–197 (Fig. 11 and Fig. 17). Its moulding is identical and it perhaps belongs to the same window frame, and corroborates the assumption that the northern and eastern façades contained such richly decorated windows.

Bohemian windows were regularly glazed, as confirmed on Vrbovec by the finds of fragments of window glass. They admitted light to representative rooms and residential chambers, like examples of windows on the palace of the Dukes of Ilok in Ilok, discovered during the 2000 recovery works and recently reconstructed (Fig. 12). Stone benches suitable for working by daylight presumably stood behind such windows (Horvat Z. 1997, 52–57). Although there were only few finds of large fragments providing sufficient information on their appearance and furnishing, we can still be reasonably certain that they had a basket-shaped iron railing on the outside, which allowed one to lean through the window and have a better view of the surroundings (Fig. 13). The presence of a railing implied that window casements opened inwards. A small stone corbel bench, as part of the lower portion of the window jamb, was habitually crafted on the outside. One of the fragments found at Vrbovec – SF 166 – probably belonged to one such bench.

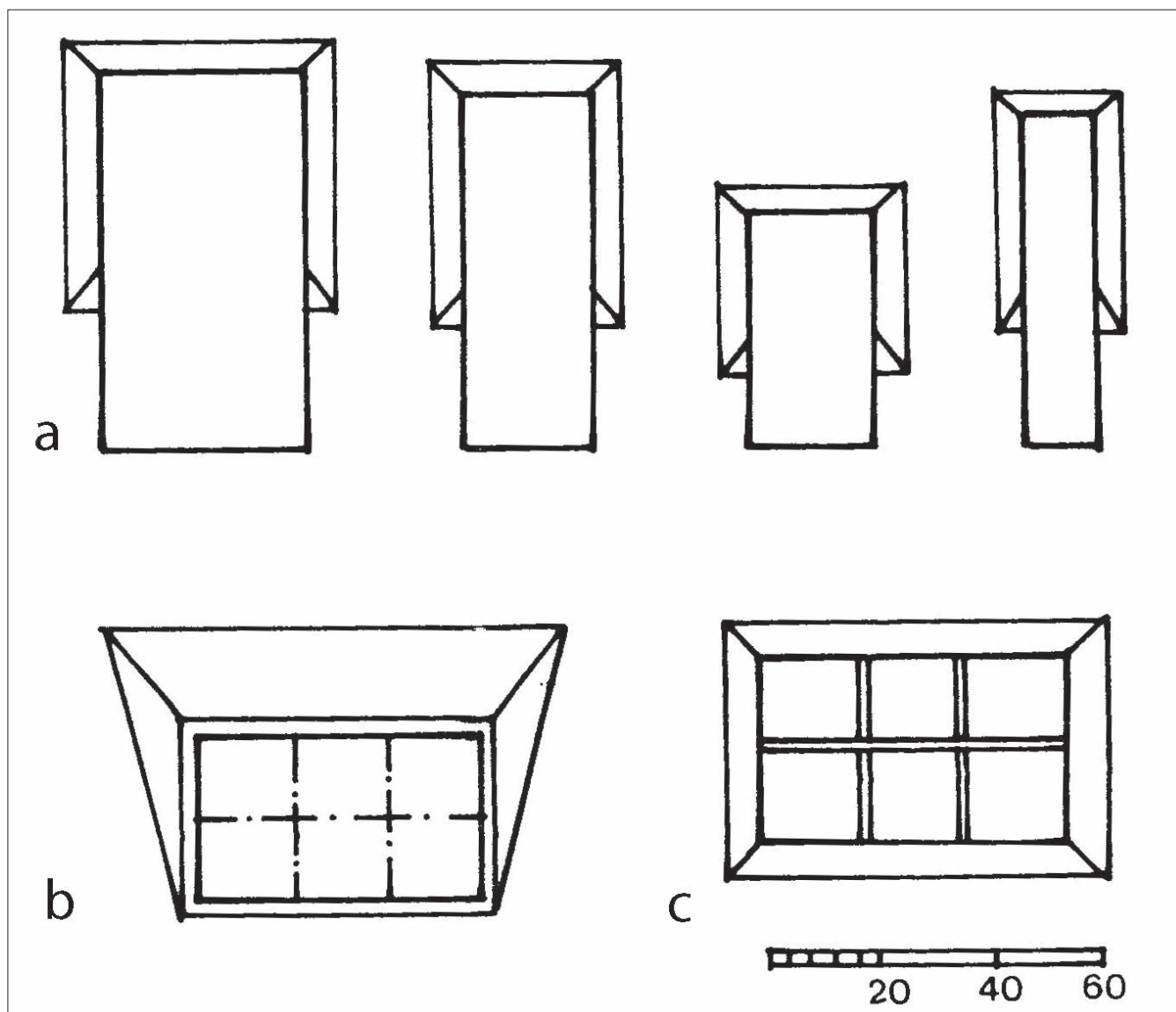
SF 166 is a fragment of a window bench that probably belonged to a “Bohemian window”. It was found in the courtyard, next to the southern wall of the northern room, and it bears testimony to a lavish furnishing of windows of this burg (Fig. 14, Pl. 7:2 – right is a drawing of an oriel from the Castle in Pazin showing the position of a bench of a “Bohemian window”). It is unusual that it was found at the position that is normally occupied by medium-sized windows. It is therefore possible that it belonged to one such window, but it may also have arrived in that position secondarily following the collapse of the walls, when the local inhabitants quarried for stone at one point in the Early Modern period.<sup>16</sup>

Interestingly, a “Bohemian window” (SF 448 and SF 450) found outside the core of the castle on the slope east of the northeastern room lacked a casement groove on the inside.

<sup>16</sup>U novije tj. moderno doba ulomak klupčice ne bi na to mjesto mogao dospjeti jer je pronađen u intaktnom sloju SJ 003, sloju urušavanja srednjovjekovnog burga. Na prostoru dvorišta je taj sloj bio prekriven novovjekovnim slojem koji nije bio oštećen. Stoga nije moguća kontaminacija tog sloja u dugom razdoblju nakon vremena propasti burga.

<sup>16</sup>The fragment of a bench could not have arrived in that place in the Modern period, because it was found in intact layer SU 003, a layer of collapse of the medieval fortified town. In the courtyard, this layer was covered with an undisturbed layer from the Modern period. This means that a contamination of that layer in the long period following the collapse of the fortified town could not have taken place.





Sl. 19 Ribnik, prikaz prozora s burga: a–tipični prozori 15. st.; b–prozor podruma s ekscentričnim oblikom prema gore otvorenog okvira; c–prozor gospodarskih prostorija sa sva četiri skošena ruba (crtež: Z. Horvat)

Fig. 19 Ribnik, a depiction of the windows of the castle: a–typical windows of the 15th cent.; b–a cellar window with an eccentric form of a frame open toward above; c–a window of rooms of economic function with all four edges beveled (drawing: Z. Horvat).

prozori“ iznutra nisu imali utor za krilo (Horvat Z. 1984–85, 42, sl. 9, sl. 10; Miletić, Valjato Fabris 2003, 72). S druge strane, drugi pak “češki prozor“ na Vrbovcu, pronađen unutar sjeverne prostorije, imao je utor s unutrašnje strane (PN 193–197). Valja napomenuti kako su prozori tog tipa znali biti smješteni i na erkerima, tako da su imali još i manje prozorčice na bočnim stranama, kao npr. na palasu Velikog Tabora ili na kaštelu u Pazinu.

### 3.2. DOVRATNICI (T. 8, T. 9)

Ulomci okvira vratiju su PN 150, PN 187, PN 190 i PN 289.

Ulomci dovratnika PN 187 i PN 150<sup>17</sup> dijelovi su nadvoja “na heljdino zrno“, što je tipični dovratnik razvijene gotike

<sup>17</sup> Ulomak PN 150 pronađen je na području kvadranta □ B5 2002. godine prilikom raščišćivanja terena od raslinja.

The case is the same with a palace of the Brinje castle from the beginning of the 15<sup>th</sup> century, which was incidentally very richly furnished. The “Bohemian windows” at that site likewise lacked an interior groove (Horvat Z. 1984–85, 42, sl. 9, sl. 10; Miletić, Valjato Fabris 2003, 72). On the other hand, the second “Bohemian window” at Vrbovec, found within the northern room, had a groove on the inside (SF 193–197). It is necessary to mention that the windows of that type were sometimes positioned on oriels, when they had additional smaller windows on lateral sides, e.g. on the palace of Veliki Tabor or on the Pazin Castle.

### 3.2. DOOR JAMBS (PL. 8, PL. 9)

Door jambs are represented by fragments SF 150, SF 187, SF 190 and SF 289.

15. st. (sl. 15, dolje lijevo). Zanimljivo je da su oba ulomka upravo dijelovi nadvoja, no međusobno se razlikuju po svojoj profilaciji. Ulomak desne strane nadvoja, gledano izvana, PN 187 ima (T. 8:1), a ulomak lijeve strane nadvoja PN 150 nema utor za smještaj vratnoga krila (T. 8:2) te se očito radi o različitim vratima, o čemu svjedoči i njihov položaj. Ulomak PN 150 pronađen je na prostoru oko ulaza u sjeverozapadnu prostoriju, tj. kuhinju u prizemlju palasa te vjerojatno i potječe s okvira kuhinjskih vrata, a PN 187 je pronađen u sjevernoj prostoriji. Ulomku dovratnika PN 187 zasigurno su pripadali PN 190 i PN 186 pronađeni nedaleko njega, a vjerojatno i PN 180, pronađen nešto sjevernije (sl. 16). PN 186, na kojem se vidi završetak profilacije ukošenja, pripada donjem dijelu dovratnika ili nadvratnoj gredi.

Ulomak PN 190 je profiliran ukošenjem i ima utor za krilo (T. 9:1). Važno je napomenuti da ne odgovara profilacijama PN 150 i PN 187. Po ulomku se ne može prepoznati oblik otvora vrata.

Ulomak PN 289 po svojoj je masivnosti mogao biti dio jednostavnog dovratnika, jačeg nadvoja, bez posebne profilacije (T. 9:2). Izgled otvora nije poznat, no sudeći po načini ulomka otvor je mogao biti jednostavan, pravokutan. Na ulomku se nalazi utor, najvjerojatnije za smještaj krila vrata. Utor za krilo je važan i zato što otežava dizanje krila vratiju sa stožera pri pokušaju provale. Izvorni položaj PN 190 nije poznat – ulomak je, naime, pronađen kao otpadni materijal kojim se zatrpavala srednjovjekovna cisterna (plan 1). No ovaj dovratnik je zasigurno pripadao vratima koja su zatvarala neku pomoćnu, ali važnu gospodarsku prostoriju (možda prostoriju u kojoj se čuvala hrana ili piće poput piva ili vina).

Općenito sagledavajući ulomke dovratnika s Vrbovca, možemo reći da se oni uklapaju u sliku kamenih okvira vrata 15. stoljeća. Vrata 15. st. najčešće su jednostavna oblika otvora, a kameni im je okvir "orijentiran": on čini pročelje prostorije (sl. 15). To istodobno znači da se vrata otvaraju prema unutra te da se krilo s unutrašnje strane osigurava jakom posmičnom drvenom gredom. Na unutrašnjoj je strani i niša vratiju, redovito presvođena segmentnim nadvojem. Početkom 15. st. okviri su još uvijek jednostavniji, pa čak i samo ukošenje ruba predočuje "bolju izvedbu", iako npr. istodobno na burgu Brinju ima više primjera vrlo bogato profiliranih kamenih okvira vratiju.

### 3.3. ULOMCI SPECIFIČNE NAMJENE (T. 10)

Dva su ulomka – PN 181 i PN 447 – bila, čini se, ugrađena kao spolija, odnosno na njima su vidljivi tragovi žbuke od zidanja, na mjestima gdje se to ne bi očekivalo, a po njihovom obliku ne može razaznati čemu su točno služili.

PN 181 je pločasti kamen (debljine 16 cm), s kvadratnom rupom u sredini, veličine 6,5 x 6,5 cm, koja je naknadno zapunjena mortom (T. 10:1). Kamen se nalazio u štiti urušenja

Door jamb fragments SF 187 and SF 150<sup>17</sup> belonged to a lintel in the shape "of a buckwheat grain", which is a typical jamb from 15<sup>th</sup> cent. Late Gothic (Fig. 15, bottom left). Interestingly, both fragments formed part of the lintel, but differ from one another by its moulding. The fragment of the right side of lintel SF 187, looked from the outside, has a groove for a door wing (Pl. 8:2), while the other has not, which makes it clear that they belonged to different doors, as corroborated by their position. Fragment SF 150 was found in the area around the entrance to the northwestern room, i.e. kitchen in the ground-floor of the palace, and it probably comes from the kitchen door frame. SF 187 was found in the northern room. SF 190 and SF 186, and probably also SF 180 (Fig. 16), found a little to the north, certainly belonged to door jamb fragment SF 187. SF 186, on which the end of the moulding of the bevel is visible, belongs to the lower part of the door jamb or the door lintel.

Fragment SF 190 is moulded with a bevel and has a case-mould groove (Pl. 9:1). It is important to mention that it does not match mouldings SF 150 and SF 187. The fragment does not allow us to recognize the shape of the door opening.

The massive volume of fragment SF 289 makes it plausible that it belonged to a simple door jamb, with a stronger lintel, without a specific moulding (Pl. 9:2). The appearance of the opening is not known, but judging by the strength of the fragment, the opening may have been simple, rectangular. The fragment contains a groove, in all probability to accommodate a door wing. The wing groove is important also because it prevents the removal of the door wing from the hinge during a break-in. The original position of SF 190 is unknown – the fragment was found as refuse material used for filling up a mediaeval cistern (Plan 1). However, this door jamb certainly belonged to a door that closed an accessory, but important room serving an economic function (perhaps a room where food or drinks like beer or wine were kept).

In general, considering the door jamb fragments from Vrbovec, we can say that they fit into the picture of stone frames of 15<sup>th</sup>-century doors. The opening of the 15<sup>th</sup>-century doors was most often of a simple shape, with "oriented" stone frame: it makes up the façade of a room (Fig. 15). This at the same time means that the door opens inwards and that the wing is secured on the inside with a strong wooden crossbar. A door niche on the inside is normally spanned with a segmented lintel. The frames from the beginning of the 15<sup>th</sup> century are still simple, and even the bevel of the edge is considered "a finer crafting", although the contemporary castle of Brinje exhibits several cases of very richly moulded stone door frames.

### 3.3. FRAGMENTS OF SPECIFIC FUNCTION (PL. 10)

Two fragments – SF 181 and SF 447 – were, it appears, built-in as spolia, that is, they exhibited traces of mortar at unexpected places. Their exact function cannot be ascertained based on their form.

SF 181 is a slab-like stone (16 cm thick) with a square hole in the middle, measuring 6,5 x 6,5 cm, which was sub-

17 Fragment SF 150 was found in the zone of square □ B5 in 2002 during the clearing of the site of the brush.

gornjih zidova, neposredno do "češkog prozora" PN 182, raspucalog u mnoštvo dijelova zbog pada i visoke temperature uzrokovane požarom (sl. 17). Na jednoj strani kamen ima užljebinu, a na drugoj zaobljenje te podsjeća na mlinski kamen, ali i kamen kojim su se brusili noževi, sjekire, mačevi i dr. Vrsta kamenog materijala izrazito je drugačija, gusta i po strukturi bi to zaista mogao biti brusni kamen. Nalaz ovog kamena usred sloja ruševine unutar srednje prostorije ništa ne govori, tim više što je to mogao biti spolij.

Prema utoru za krilo, za kamen PN 447 se čini da je to bila natprozorna greda manjeg prozora, specifična oblika i namjene (T. 10:2). Na plohamu kamena vidljivi su tragovi bojenja okerom (sl. 18). Utor za krilo, dužine 33,5 cm daje nam mogućnost procjene veličine prozora: širina svijetla otvora mogla je biti 25–26 cm. Uz mogući omjer svijetlog otvora  $\text{š} : \text{v} = 2 : 3$  – što je vrlo učestali omjer u 15. st. – svijetli je otvor mogao biti 25/39 cm. Promjenljiva profilacija odgovara asimetričnom obliku doprozornika. Jaka ukošenja možda odgovaraju smjeru gledanja – pretpostavimo – ulazu u burg. Nesimetričan oblik doprozornika odgovara pogledu usmjerenu lijevo i dolje, dakle, odgovara prilazu sa sjevera, a duž istočnog zida burga. Nalaz ovoga klesanog detalja istočno od palasa može odgovarati pretpostavljenom putu ulaženja i položaju prozora nad ulazom. Za usporedbu s našim primjerkom valja spomenuti podrumski prozor s burga Ribnik, čiji je okvir ekscentrično otvoren prema gore (sl. 19). Zanimljiva je i usporedba s malim prozorom na stubištu palasa Garić–grada, gdje okvir prozora podsjeća na trokutasto udubljenje prisutno na vrbovečkom PN 447, s time da na našem primjerku, kako je objašnjeno, smještaj trokutastog udubljenja, s obzirom na utore za smještaj krila, nije simetričan.

#### 4. ZAKLJUČNA RAZMATRANJA

Arheološka istraživanja na položaju Veliki Gradiš u Klenovcu Humskome donijela su na svjetlo dana, uz ostale razne pojedinosti, vrlo kvalitetne klesane dijelove arhitektonske plastike i pojedinosti svakodnevna života 13. – 15. te s početka 16. st. Naziru se tri faze gradnje, iako to još ne može biti konačna konstatacija, jer postoje naznake i ranijeg života na tome položaju. Prvu fazu gradnje svjedoči sam tlocrt burga, za drugu, osim ziđa, množina kvalitetnih ulomaka arhitektonske profane plastike i poneka zaostala pojdinost u zidovima. Treća je, novovjekovna faza mogla koristiti ruševne zidove burga nakon što je burg stradao u požaru. Ovamo spadaju tragovi dosta primitivnog prilagođavanja starijeg ziđa za vjerojatno drvenu stražarnicu.

U ovome radu analizirani klesani detalji kao i ostali arheološki nalazi s Vrbovca potvrdili su da se u 15. st. dogodila promjena u arhitekturi i opremi burgova, odnosno da je došlo do značajnog uzdizanja životnog standarda, što je značilo više svjetla, topline (kaljeve peći), veće površine

sequently filled with mortar (Pl. 10:1). The stone lay in the construction waste of the debris of the upper walls, adjacent to the "Bohemian window" SF 182, broken into a number of pieces from the fall and high temperature caused by fire (Fig. 17). The stone has a groove on one side and it is rounded on the other, resembling a mill stone, but also a whetstone for sharpening knives, axes, swords and the like. The stone material is markedly different, quite dense, and its fabric makes it probable that it was indeed a grindstone. The find of this stone in the midst of debris within the central room says nothing, all the more so as it may have been a spolia.

The casement groove on stone SF 447 makes it plausible that it belonged to a lintel of a smaller window, of specific shape and function (Pl. 10:2). The surfaces of the stone exhibit traces of ochre paint (Fig. 18). The casement groove, 33,5 cm long, allows us to assess the size of the window: the width of the light opening may have been 25–26 cm. If we consider that the very frequent width/height ratio for the light opening in the 15<sup>th</sup> century was 2 : 3, the light opening probably measured 25/39 cm. Varying moulding corresponds to the asymmetrical shape of the window jamb. Pronounced slants perhaps correspond to the direction of the view, presumably, to the entrance to the castle. Asymmetrical shape of a window jamb is compatible with a view directed left and bottom, i.e. it corresponds to the access from the north, along the eastern wall of the castle. The find of this carved detail east of the palace is compatible with a presumed direction of entry and position of the window above the entrance. For comparison with our example we should mention the cellar window from the castle of Ribnik, whose frame is eccentrically open towards above (Fig. 19). A comparison with a small window in the staircase of the palace at Garić–grad is also interesting. The window frame there is reminiscent of a triangular depression on SF 447 from Vrbovec, but on our piece, as has been explained, the position of the triangular depression is not symmetrical with regard to the casement grooves.

#### 4. CONCLUDING OBSERVATIONS

Archaeological investigations at the site of Veliki Gradiš in Klenovac Humski brought to the light of day, in addition to various other details, carved architectural stonework of very good quality as well as facets of everyday life of the 13<sup>th</sup>–15<sup>th</sup> cent. and the beginning of the 16<sup>th</sup> century. Three phases of construction are discernible, but this cannot be a final statement, because there are indications of earlier life on that position. The first phase of construction is evident from the very layout of the castle. The second, in addition to the walls, is revealed by the large number of good-quality profane architectural stonework and occasional preserved details in the walls. The third, Modern-period phase, may have used decrepit walls of the burg after it was devastated by fire. In this phase, the earlier walls were rather crudely adapted into a presumed wooden sentry post.

The carved details and other archaeological finds from Vrbovec, analyzed in this paper, confirmed that a change in the architecture and furnishing of the castles occurred in the 15<sup>th</sup> century, i.e. that the living standard significantly improved, resulting in more light, heat (tile stoves), room space,



prostorija, bogatiju opremu prostorija (oslikavanje zidova, stropova i pročelja), krovove pokrivene crijepom, sve u kontekstu općeg razvoja gospodarstva, materijalnih mogućnosti i razvoja misli – humanizma. Većinu ovakvih detalja – staklo, crjepovi, kaljevi, stolno keramičko posuđe, metalne i ostale predmete koji ukazuju na prosperitet korisnika, iznjedrila su arheološka istraživanja Vrbovca, koja nam omogućavaju da u konačnici zaokružimo sliku života na jednom burgu u posjedu srednjoeuropskog magnata u prvoj polovini 15. st.

Gradnja ili, bolje reći, nadogradnja bogato opremljena burga Vrbovca na relativno malom tloctu iz romaničkog – romaničko-gotičkog razdoblja znači da se objekt dizao u visinu: osim utvrđena prizemlja, očito su izvedene još dvije etaže, tj. I. i II. kat. S obzirom da su neki gotički detalji nađeni *in situ* u prizemlju, možda nije mnogo zadržano od starijega, romaničkog burga, osim tlocrta vanjskog zida, a vjerojatno i branič-kule.

Nalazi kamenih ulomaka okvira prozora daju naslutiti visoku kvalitetu i načine izvedbe, koja je bila na razini ostalih značajnijih srednjoeuropskih burgovi s kraja 14. do početka 15. st. koju na Vrbovcu povezujemo s vladavinom grofova Celjskih.

Vrijeme petnaestog stoljeća ujedno je i vrijeme pre-vage plemićkih dobara koje je, prema opće prihvaćenom historiografskom shvaćanju, u vezi s raspadom kraljevskog patrimonija i formiranjem feudalne oligarhije. U prva tri desetljeća 15. stoljeća grofovi Celjski doživljavaju svojevrstu ekspanziju moći. Zasluge u bitci kod Nikopolja su Hermanu II. Celjskom priskrbile dobre prijateljske odnose s ugarskim kraljem Žigmundom i donijele mu neslućene ovlasti na hrvatskom prostoru, odnosno u srednjovjekovnoj Slavoniji. Godine 1397. Žigmund mu poklanja Varaždin, a ubrzo i burgove Vinicu i Vrbovec sa svim dobrima, trgovima i mitnicama (Kosi 1998, 172–173).<sup>18</sup> Godine 1399. čitava Zagorska županija s osam burgova i nekoliko mitnica došla je u ruke Hermana Celjskog. Vladavina Celjskih i kraljice Barbare, odnosno vrijeme prve polovine 15. stoljeća, doba je kada se razvija značajna građevna aktivnost diljem Hrvatske u kojoj sudjeluju i knezovi Celjski. Grb knezova Celjskih nalazimo u nedalekoj kapeli Sv. Ane u Plemenščini kraj Pregrade, zatim na svodu pavlinske crkve Sv. Marije u Lepoglavi, a naslikan je i na ulaznoj kuli grada Varaždina. Njihova graditeljska djelatnost je prepoznatljiva i u Kamenskom te u Heleni kraj Čakovca, na crkvi u Mihovljanu kraj Čakovca itd. (Peić Čaldarović 1998, 203; Horvat Z. 2004, 23). Njihovo sjedište u Zagorju postala je Krapina, gdje su također evidentne nove gradnje iz doba Celjskih (Tomičić 1995, 119–122). Sam je Vrbovec vjerojatno trebao poslužiti kao odmorište, stanica na putu iz Celja prema Krapini te dalje prema Zagrebu. U samome naselju Celje bogato opremljeni kaštel monumentalan je primjer njihove građevne djelatnosti. Celjski su

18M. Kosi, pa i drugi autori, pripisuje ovaj spomen Vrbovca Velikome Taboru. U arheološkim istraživanjima Velikog Tabora za sada nema tragova fazama burga starijim od početka 16. stoljeća. Spomen Vrbovca valja povezati uz burg Vrbovec u Klenovcu Humskome.

more lavishly equipped rooms (painting of walls, ceilings and facades), tiled roofs, all in the context of the general development of economy, material means and development of thought – humanism. Most details of this type – glass, tiles, tile stoves, ceramic tableware, metal and other objects indicating the prosperity of their users, were obtained by archaeological investigations of Vrbovec, which allow us to eventually complete the picture of life in a castle owned by central European magnates in the first half of the 15<sup>th</sup> century.

The construction or, more precisely, reconstruction of the richly furnished castle of Vrbovec on a relatively small layout from the Romanesque – Romanesque/Gothic period reveals that the structure was built upwards: in addition to the fortified ground-floor, obviously two more floors – i.e. the 1<sup>st</sup> and 2<sup>nd</sup> floors – were added. Considering that certain Gothic details were found *in situ* in the ground-floor, perhaps not much was preserved from the earlier, Romanesque burg, except for the layout of the outer wall, and probably also the keep.

The finds of stone fragments of window frames hint at a high-quality workmanship on the level with other important central European castles from the end of the 14<sup>th</sup> and the beginning of the 15<sup>th</sup> century, connected in case of Vrbovec with the rule of the Counts of Celje.

The 15<sup>th</sup> century is at the same time the period of prevalence of feudal estates that is, according to a generally accepted view in the historiography, related with the disintegration of royal patrimony and the formation of feudal oligarchy. The Counts of Celje experienced an expansion of power of sorts in the first three decades of the 15<sup>th</sup> century. The merits in the Battle of Nicopolis earned Hermann II of Celje a good friendly relationship with the Hungarian king Sigismund and procured him immense authority over Croatia, that is, mediaeval Slavonia. Sigismund gave him Varaždin as a gift in 1397, and soon also the castles of Vinica and Vrbovec, with all possessions, markets and toll-houses (Kosi 1998, 172–173).<sup>18</sup> In 1399 the entire Zagorje county with eight castles and several toll-houses came into the hands of Hermann of Celje. The rule of the Counts of Celje and queen Barbara, that is the first half of the 15<sup>th</sup> century, is the time of considerable building activity throughout Croatia, in which the Counts of Celje also participated. The coat of arms of the Counts of Celje is found in the nearby chapel of St. Anne in Plemenščina near Pregrada and on the vault of the Paulist Church of St. Mary in Lepoglava. It was also depicted on the entrance tower of the castle of Varaždin. Their construction activity is recognizable also in Kamensko and in Helena near Čakovec, on the church in Mihovljan near Čakovec and elsewhere (Peić Čaldarović 1998, 203; Horvat Z. 2004, 23). Krapina became their seat in the Zagorje region, where new buildings from the time of the Counts of Celje are also evident (Tomičić 1995, 119–122). The Vrbovec itself was probably intended as a resting place, a station on the way from Celje towards Krapina and further to Zagreb. The richly furnished castle in the town of Celje is a monumental example of their building activity. The Counts of Celje formed direct matrimonial alliances with the royal

18M. Kosi and other authors attribute this mention of Vrbovec to Veliki Tabor. Archaeological investigations of Veliki Tabor so far yielded no trace of earlier phases of the burg from the beginning of the 16<sup>th</sup> century. The mention of Vrbovec should be connected with the fortified town of Vrbovec in Klenovec Humski.

udajom Barbare, kćeri Hermana II. za kralja Žigmunda imali i direktne ženidbene veze s kraljevskim dvorom u Budimu. Njihove su veze vodile i dalje, prema Pragu i značajnim češkim gradilištima iz kruga Petra Parlera, ali i prema nekim drugim dvorskim gradilištima onodobne Češke. Međutim, to je i doba kad mnoga češka gradilišta prestaju s radom zbog građanskih ratova, a majstori se razilaze po čitavoj Europi. Sve ove veze govore o utjecaju najnaprednije gotičke arhitekture srednje Europe početkom 15. st. i na gradilišta knezova Celjskih pa i na naš Vrbovec. Utjecaje čeških graditelja nalazimo i drugdje po Hrvatskoj, spomenimo samo gradilište broda zagrebačke katedrale, burg u Brinju knezova Krčkih, kasnijih Frankopana, pavlinski samostan u Kamenskom kraj Karlovca, benediktinski samostan u Bijelju, palas burga Čarića, nadogradnje na Medvedgradu itd.

Vrbovec nikako nije usamljen slučaj burga s fazom kvalitetne gradnje iz razdoblja Celjskih, no on je u nas prvi takav lokalitet koji je do danas gotovo u cjelini istražen, na njemu je arheološkim istraživanjem sagledan presjek života na jednome burgu, od njegovih samih početaka do propasti, na njemu je uočena arhitektonska mijena od jednoga nevelikoga starijeg burga do burga opremljenog vrhunskom arhitektonskom plastikom tijekom prvih desetljeća 15. stoljeća.

court in Buda upon the marriage of Hermann II's daughter Barbara to king Sigismund. Their ties stretched even further, to Prague and important Bohemian building sites from the circle of Peter Parler, but also toward other court construction works in the Bohemia of the time. However, this is also the period when many Bohemian construction works cease with work due to civil wars, and the master builders disperse all over Europe. All these ties speak of the impact of the most developed Gothic architecture of central Europe at the beginning of the 15<sup>th</sup> century also on the construction works of the Counts of Celje, including our Vrbovec. The influence of Bohemian master masons is encountered elsewhere in Croatia, let us mention only the construction of the nave of the Zagreb cathedral, the burg in Brinje, which belonged to the Dukes of Krk, the later Frankopans, the Paulist monastery in Kamensko near Karlovac, the Benedictine monastery in Bijela, the palace of the castle of Čarić, the building additions at Medvedgrad etc.

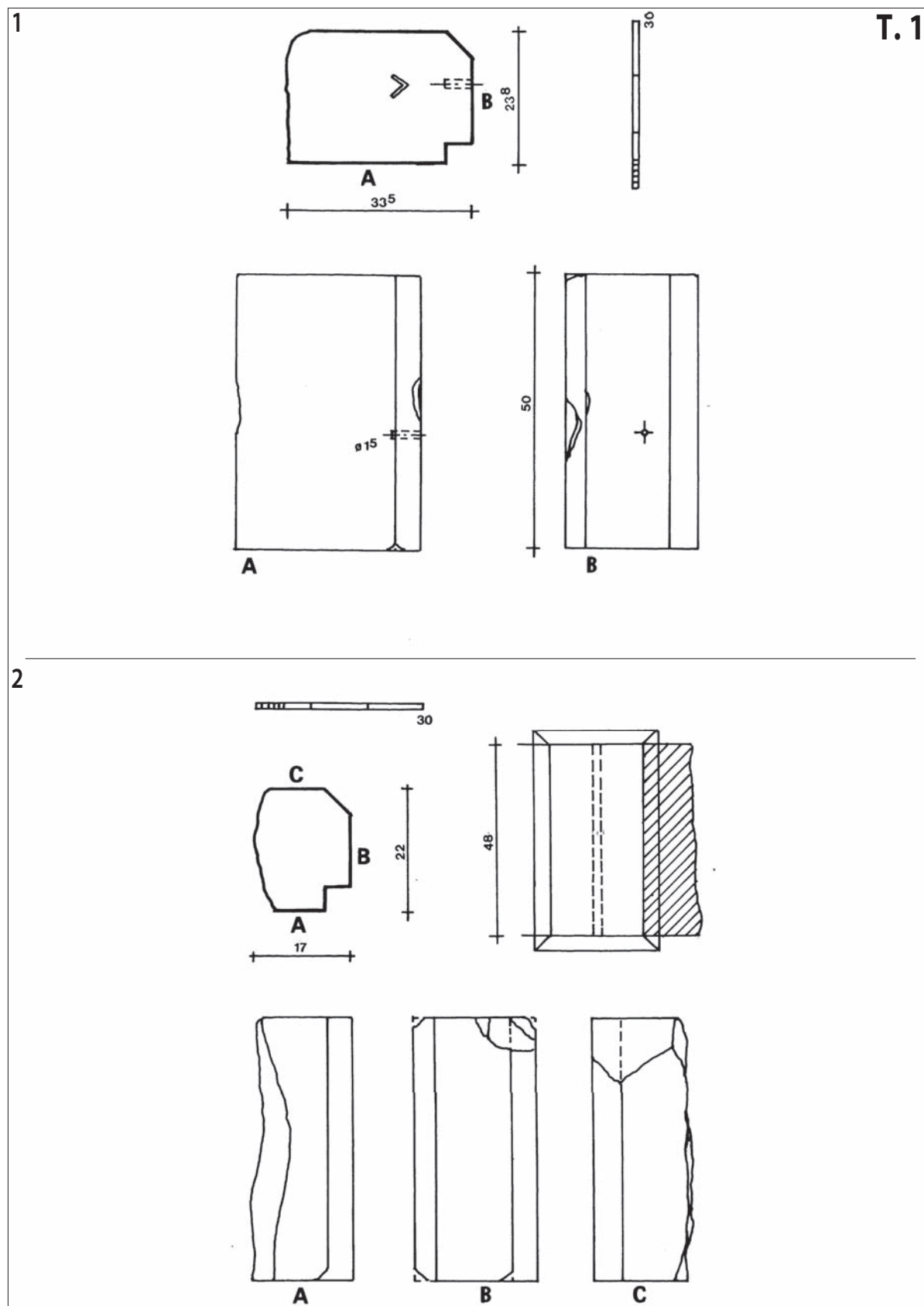
Vrbovec is by no means a sole example of a castle with a phase of good-quality construction from the period of the Counts of Celje. However, it is the first such example in Croatia to be almost completely investigated. Archaeological investigations of the castle provided a view of the life in a burg, from its first beginnings to its collapse. It also allowed us to observe the architectural change from a small earlier burg to the one furnished with top-quality architectural stonework during the first decades of the 15<sup>th</sup> century.

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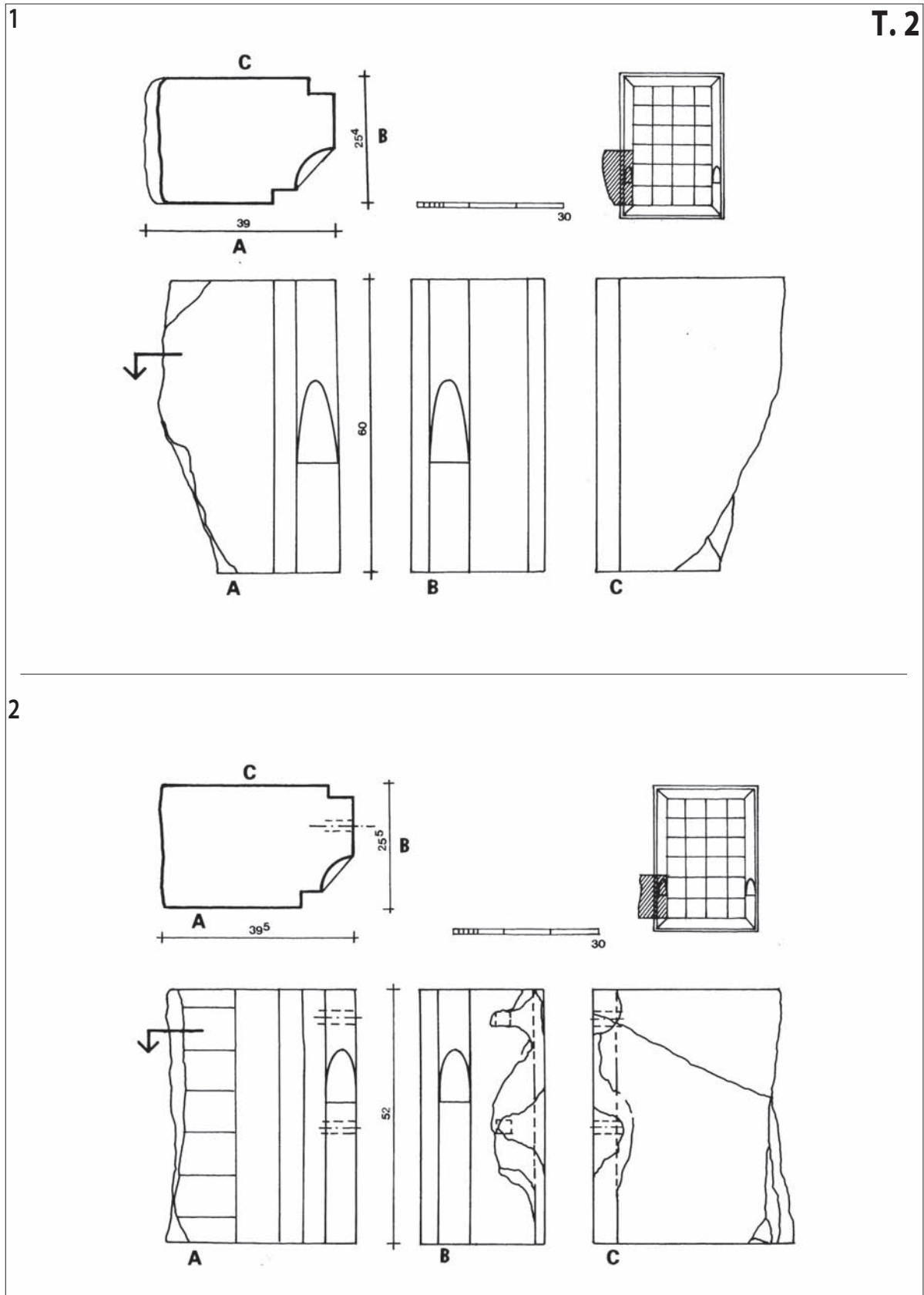
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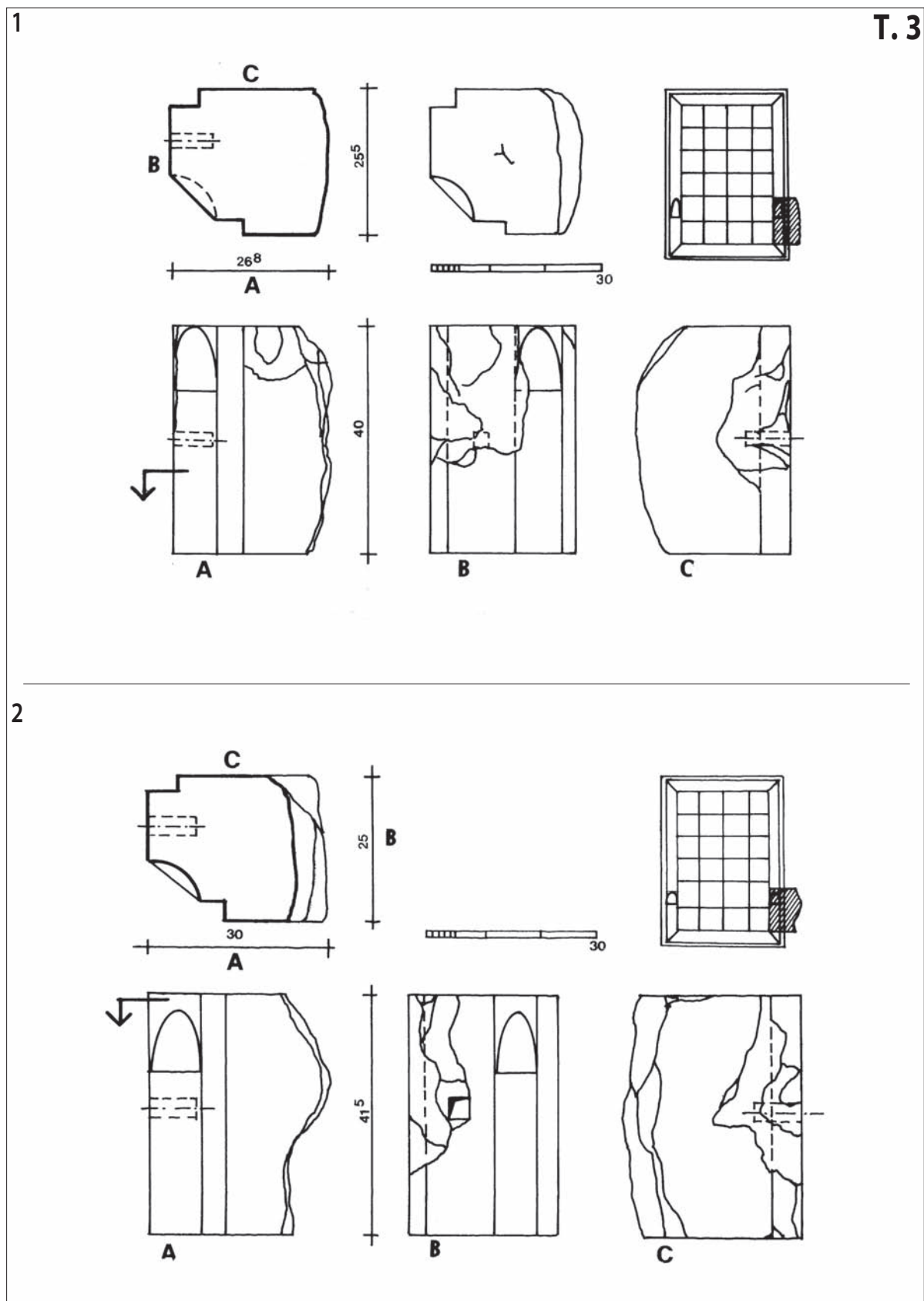




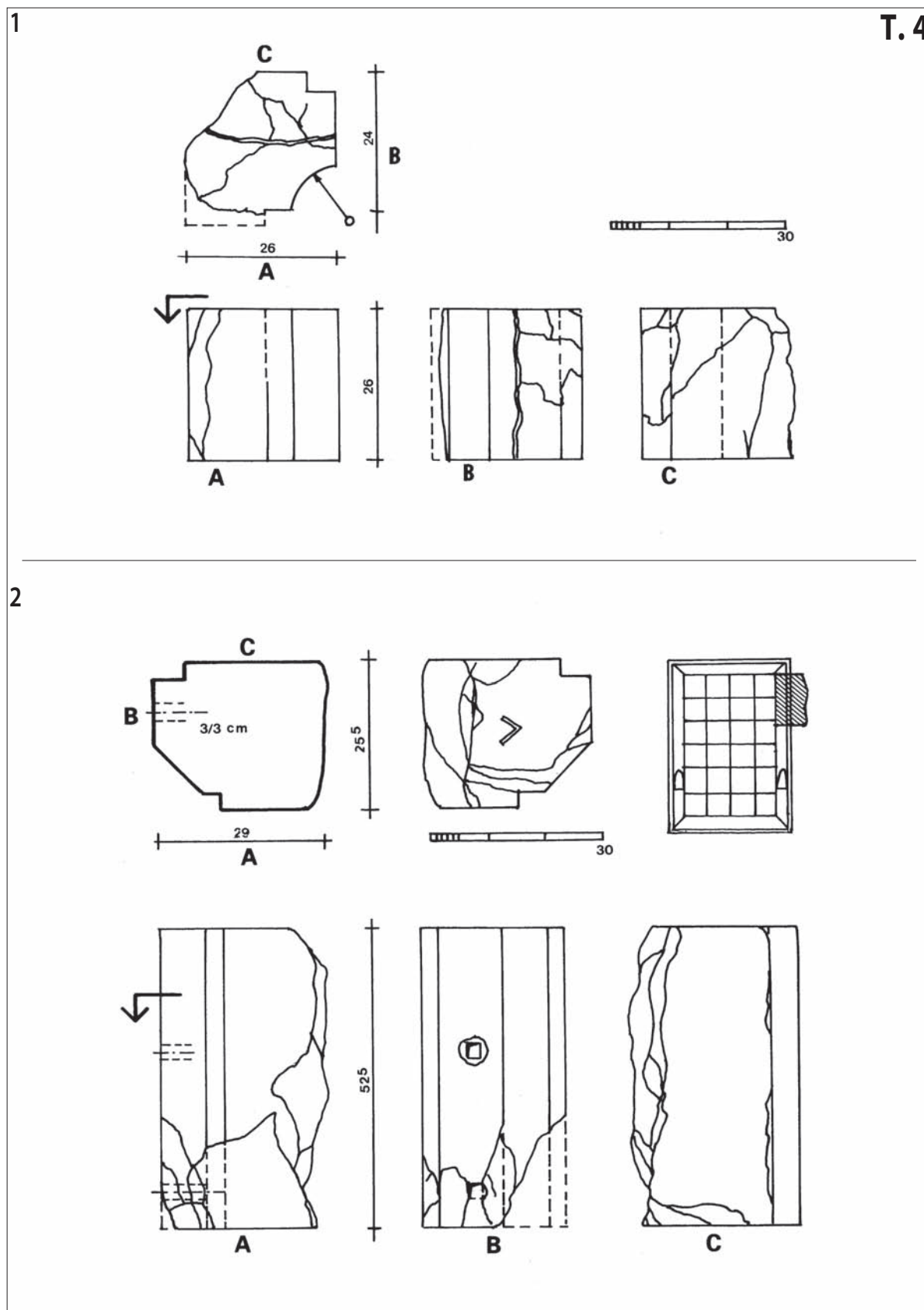
T. 1 Manji prozori – 1: PN 184; 2: PN 227 (desno gore – mogući izgled prozora i pozicija ulomka) (crtež: Z. Horvat)  
 Pl. 1 Small-sized windows – 1: SF 184; 2: SF 227 (above right – a possible appearance of a window and positions of fragments) (drawing: Z. Horvat)



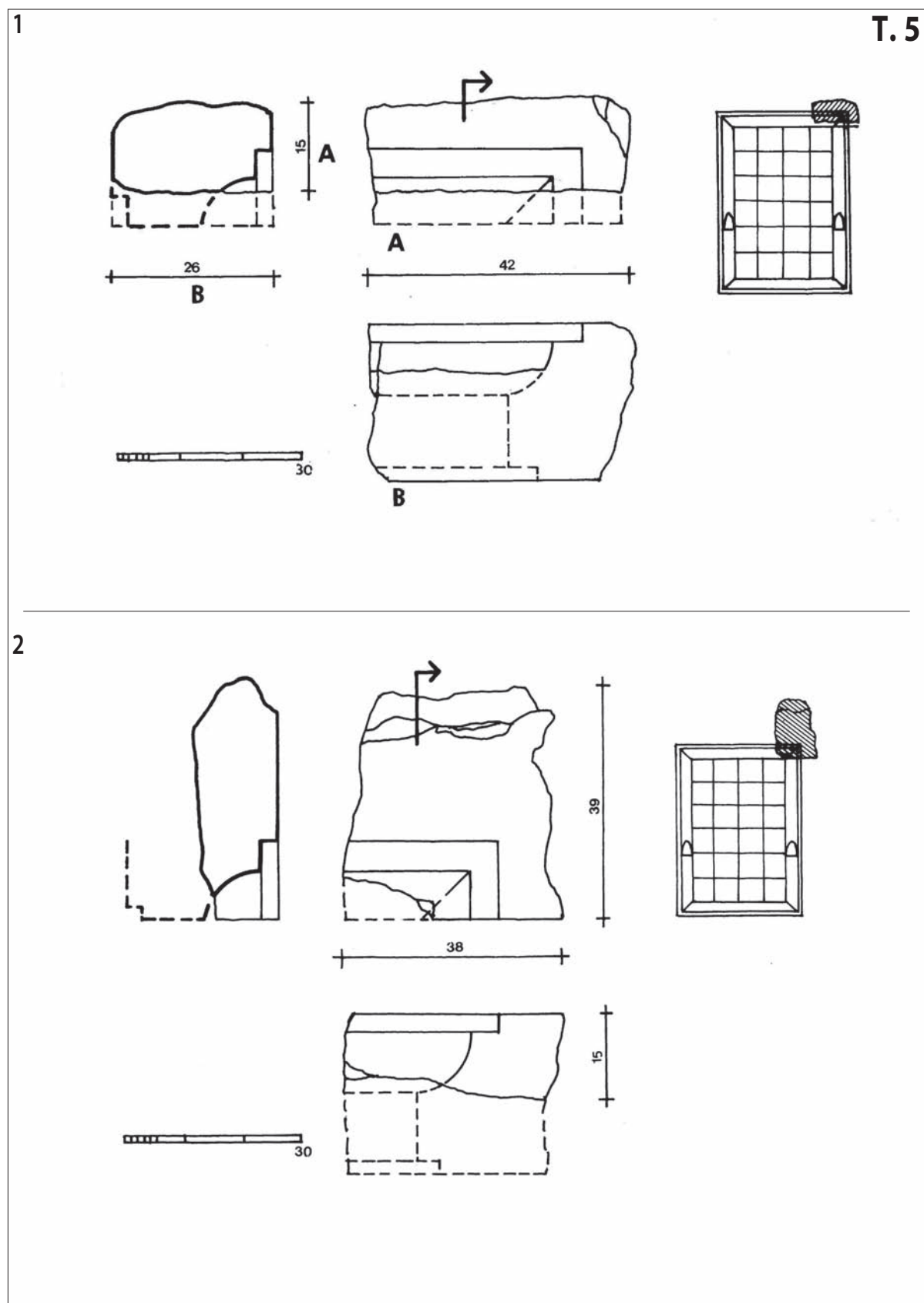
T. 2 Prozori srednje veličine – 1: PN 264; 2: PN 426 (crtež: Z. Horvat)  
Pl. 2 Medium-sized windows – 1: SF 264; 2: SF 426 (drawing: Z. Horvat)



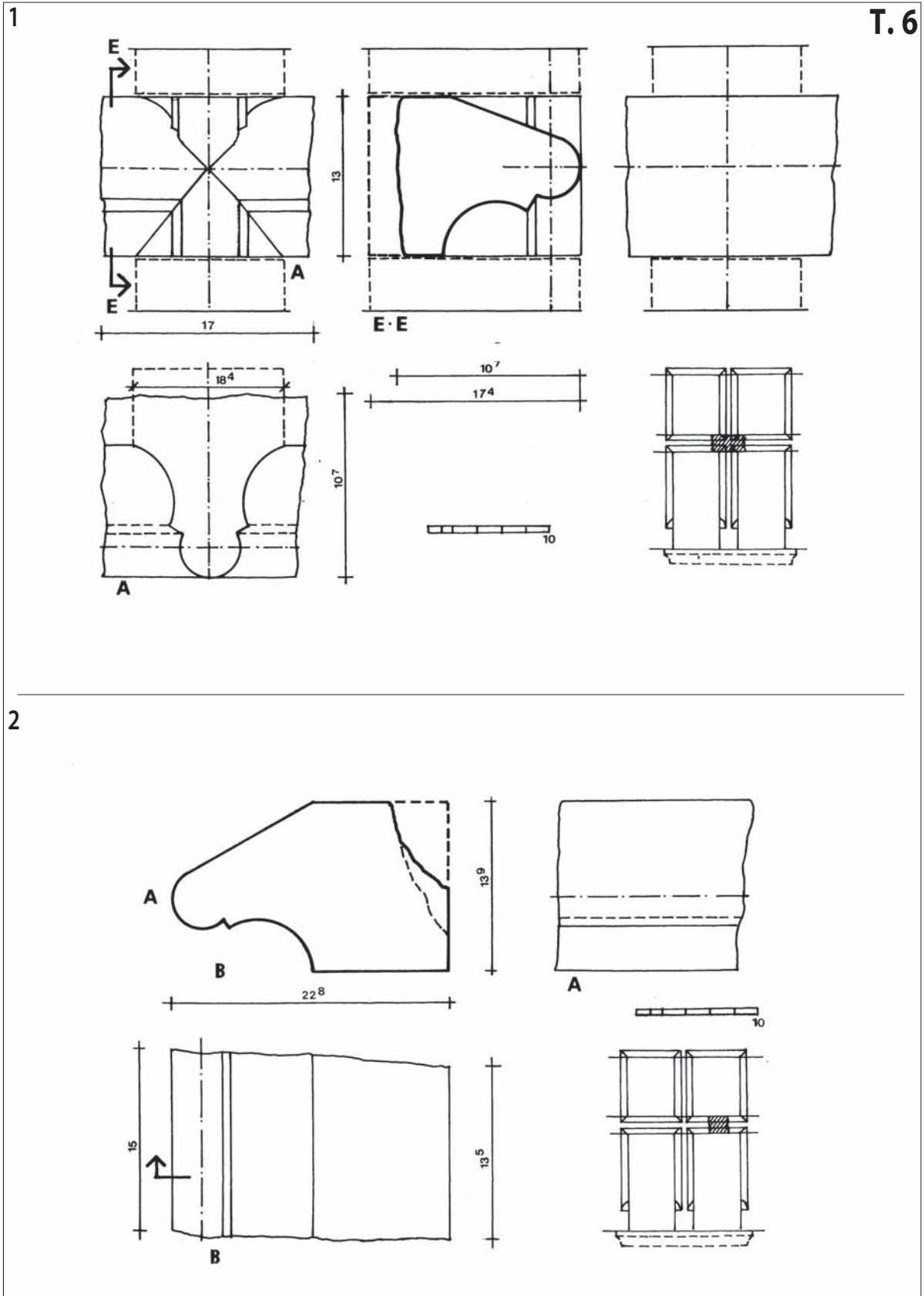




T. 4 Prozori srednje veličine – 1: PN 258; 2: PN 183 (crtež: Z. Horvat)  
 Pl. 4 Medium-sized windows – 1: SF 258; 2: SF 183 (drawing: Z. Horvat)



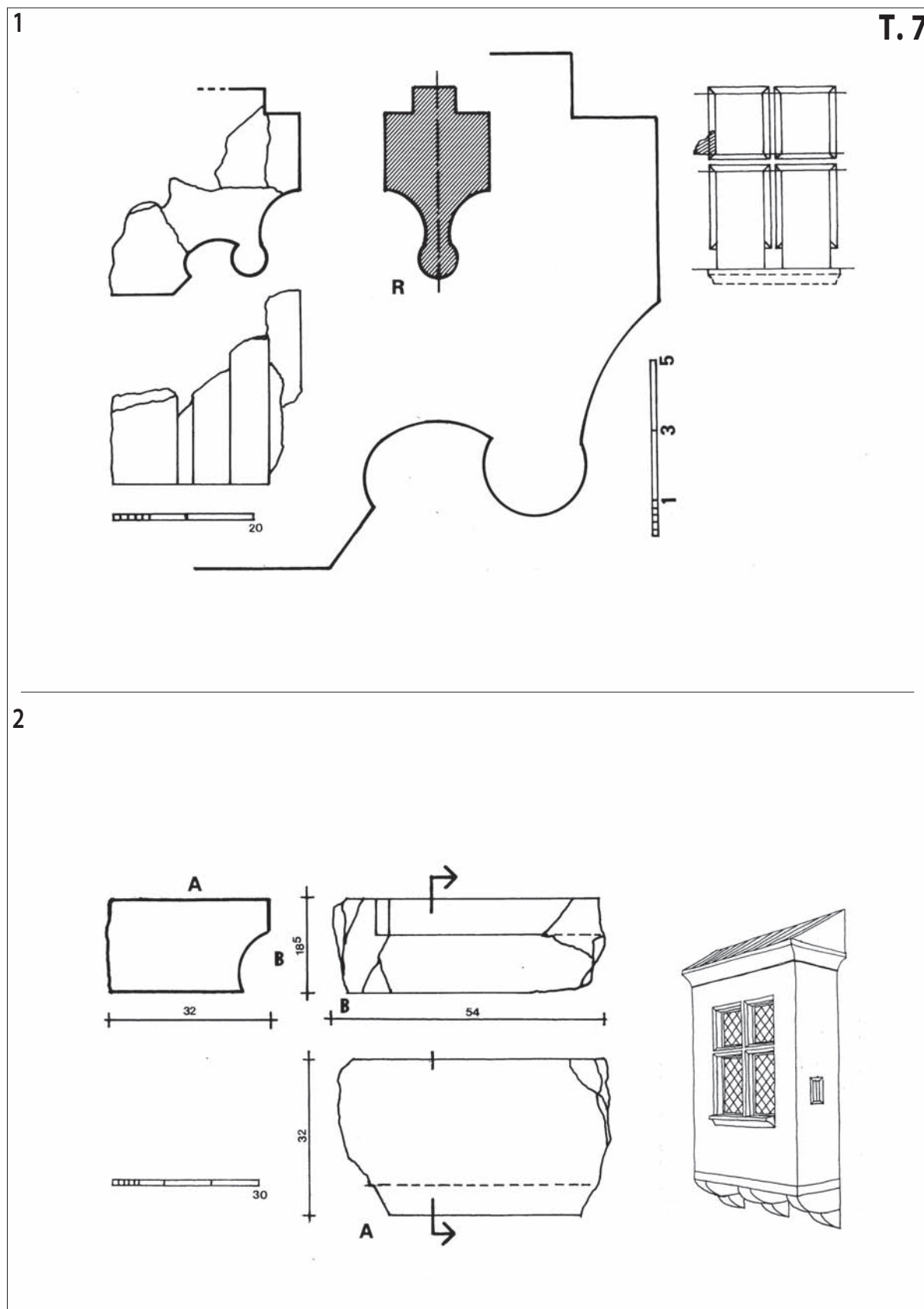
T. 5 Prozori srednje veličine – 1: PN 261; 2: PN 262 (crtež: Z. Horvat)  
Pl. 5 Medium-sized windows – 1: SF 261; 2: SF 262 (drawing: Z. Horvat)



T.6 "Češki prozori" – 1: PN 448; 2: PN 450 (crtež: Z. Horvat)

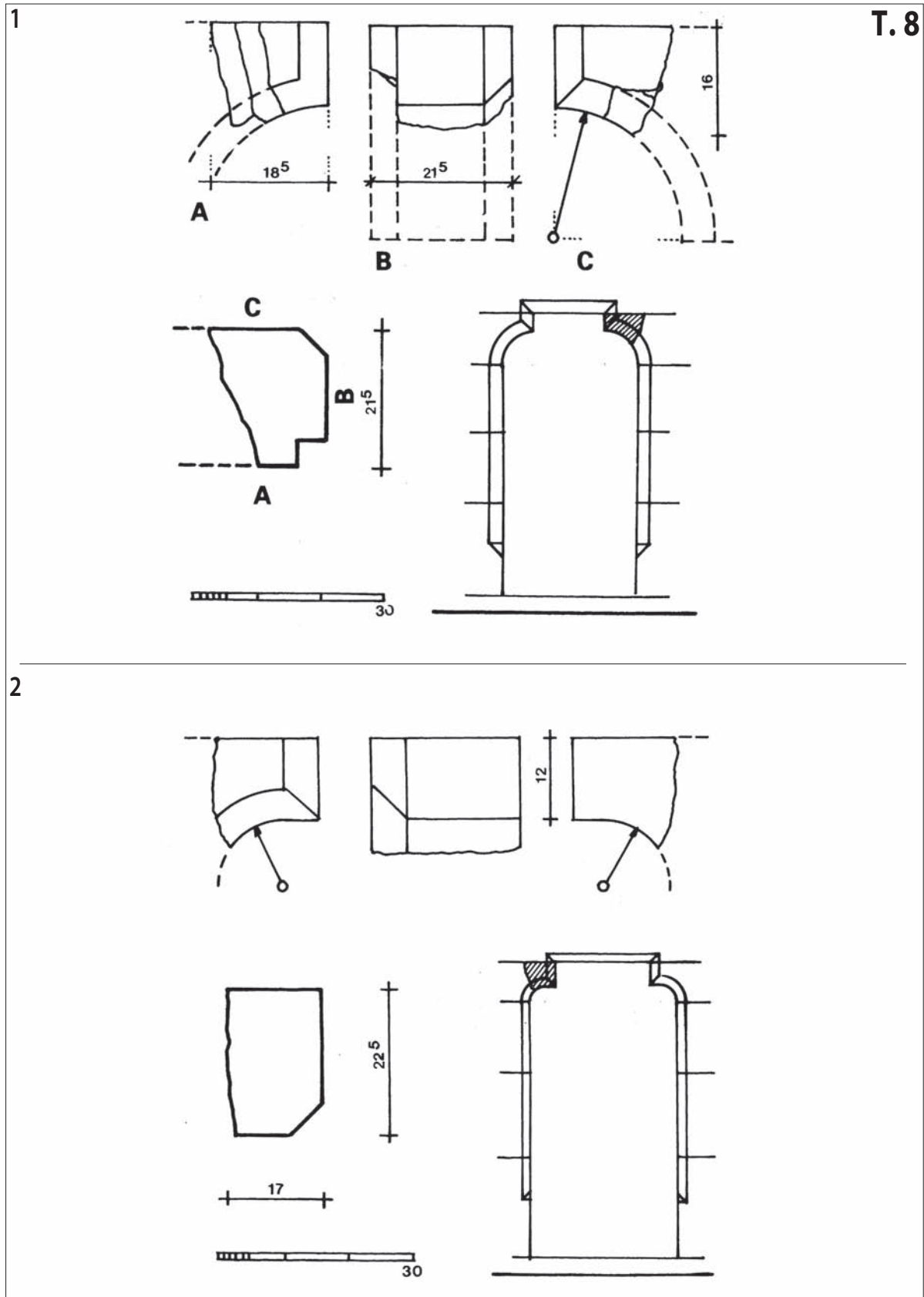
Pl.6 "Bohemian windows" – 1: SF 448; 2: SF 450 (drawing: Z. Horvat)



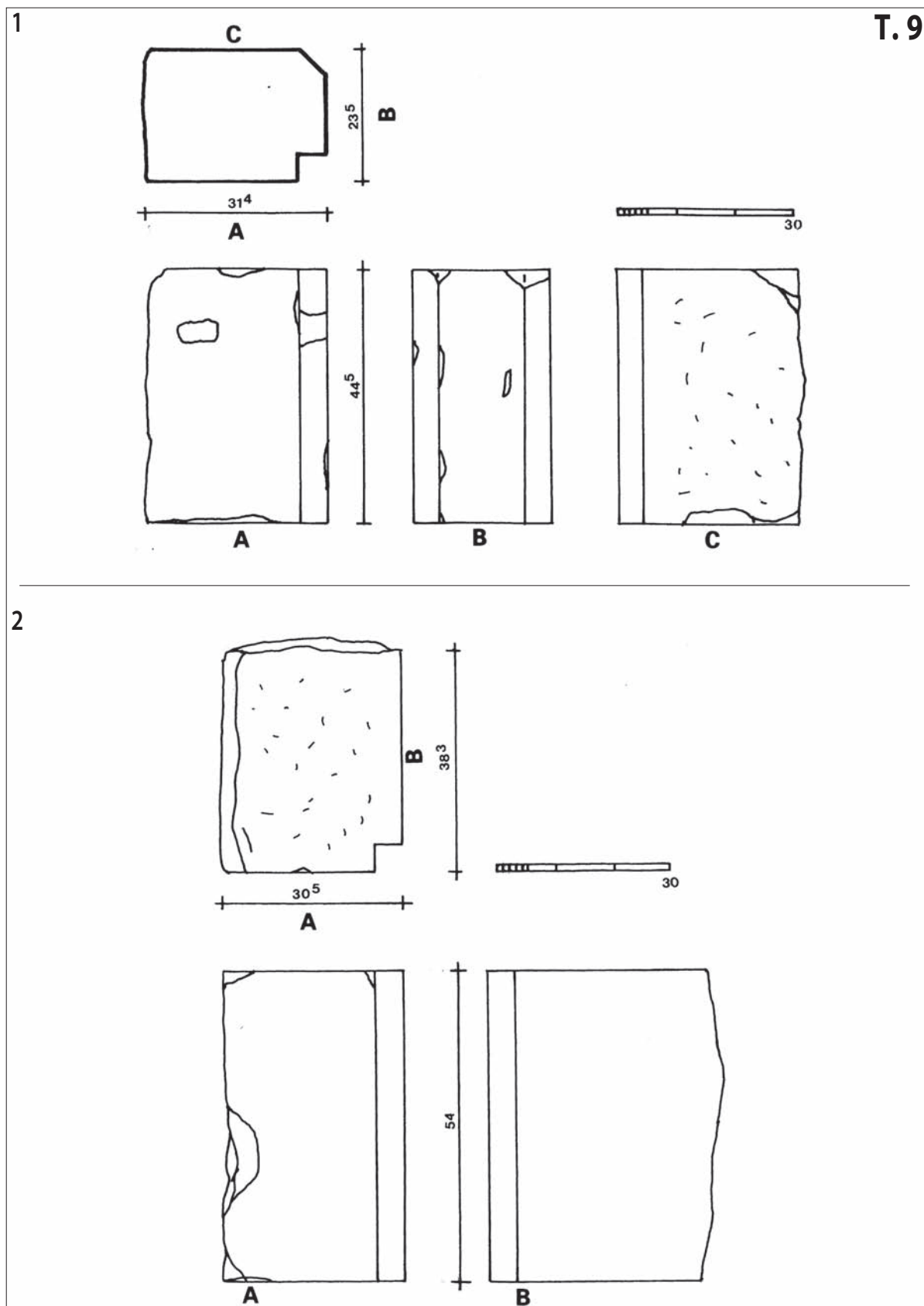


T. 7 "Češki prozor" – 1: PN 193–197; 2: ulomak klupčice PN 166 (crtež: Z. Horvat)

Pl. 7 "Bohemian window" – 1: SF 193–197; 2: fragment of a small bench: SF 166 (drawing: Z. Horvat)

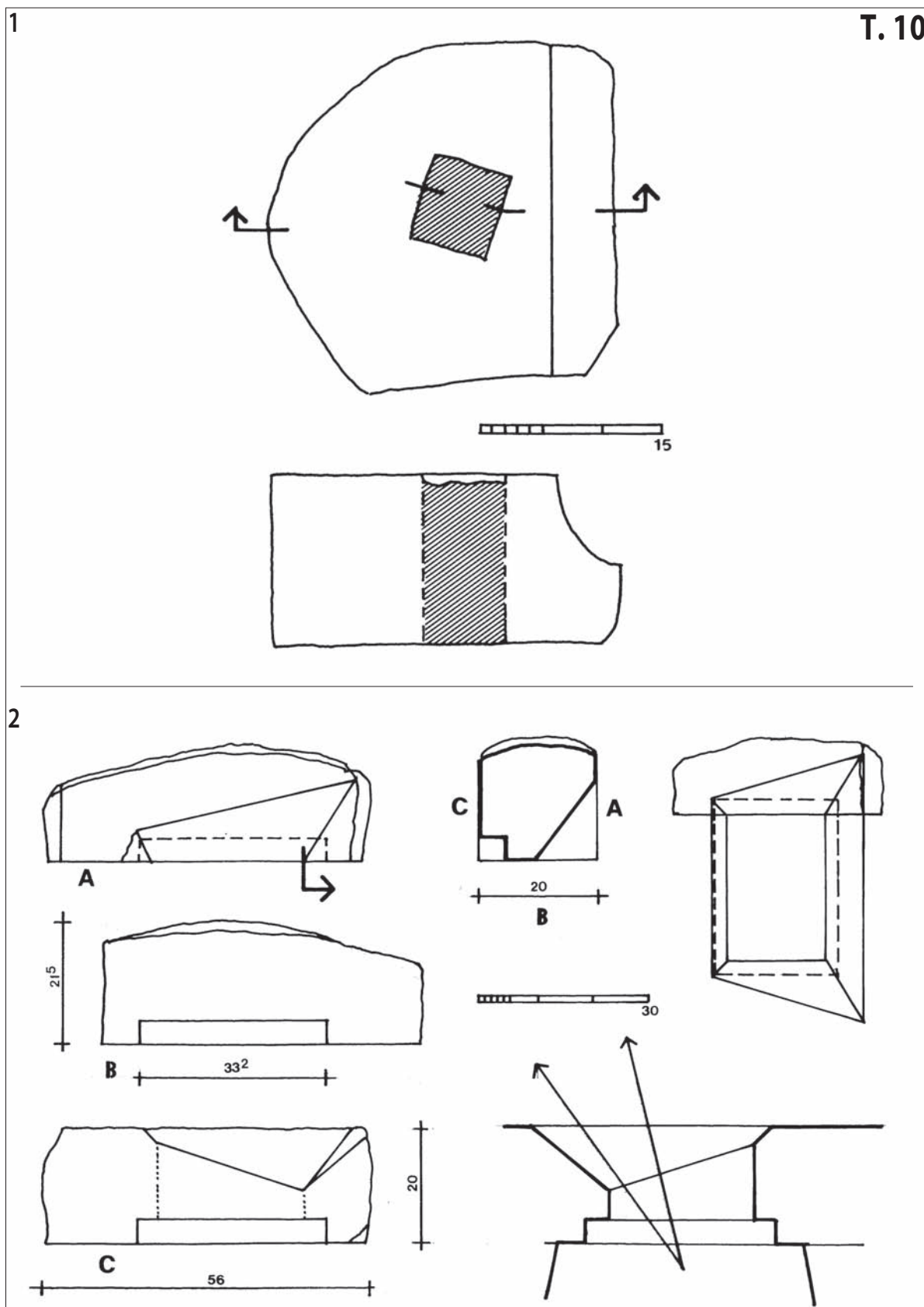


T. 8 Dovratnici – 1: PN 187; 2: PN 150 (crtež: Z. Horvat)  
Pl. 8 Door jambs – 1: SF 187; 2: SF 150 (drawing: Z. Horvat)



T. 9 Dovratnici – 1: PN 190; 2: PN 289 (crtež: Z. Horvat)  
Pl. 9 Door jambs – 1: SF 190; 2: SF 289 (drawing: Z. Horvat)





T. 10 Ulomci specifične namjene – 1: PN 181– brusni kamen korišten kao spolij; 2: PN 447 – mali prozor specifične namjene (crtež: Z. Horvat)

Pl. 10 Fragments of specific function – 1: SF 181 – a grindstone used as a spolia; 2: SF 447 – a small-sized window of specific function (drawing: Z. Horvat)