

Ethnohistorical Processes and Demographic Structure of the Island of Rab, Croatia

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ABSTRACT

The present paper aims at describing the most relevant background data on geomorphological, economic, ethno-historic and demographic features of the island of Rab. They show the most important population movements to the island that affected its population structure. This work, as a part of the holistic anthropological research of morphological, physiological, genetic and socio-cultural variables which have been carried out on the island of Rab, seeks to identify both internal and external impulses of change and/or continuity of the island population structure within a wider socio-cultural and historical context.

Key words: island of Rab, population history, demography, migration

Introduction

The autochthonous population of the Adriatic islands is considered to be one of the most suitable models for investigating the process of human microevolution due to its geographical and reproductive isolation. Holistic anthropological research on the Eastern Adriatic islands has been conducted since 1971. During the past 37 years, detailed characterizations of migration, demography, isonymy, linguistic differences, anthropometric traits, physiological properties, quantitative and qualitative dermatoglyphic traits, radiogrammetric metacarpal bone dimensions and genetic traits were performed. As some of the few persisting isolates among contemporary European human groups, rural populations of the islands of the eastern Adriatic in Croatia reveal some of the peculiarities that make them very suitable for such analyses. Some of those characteristics include reconstructable population history, known migrations that have occurred during a very long time period, their continuing reproductive isolation and well-documented effects of various extrinsic events that, through generations, directly influenced their biological formation¹. The first anthropological field investigation of the Eastern Adriatic islands was carried out on the island of Hvar^{1-4,13}, than on the islands of Silba^{5,7,11}, Olib^{6,9,11}, Pag^{8,20}, Korčula^{10,12,18}, on the peninsula Pelješac^{10,12,15}, on the islands of Brač^{14,16}, Krk^{17,21} and Vis²⁰. A long term anthropological research of the population structure of the East Adriatic rural popula-

tions has now been extended to the investigation of the population structure of the island of Rab. This study is a part of the holistic anthropological investigations of morphological, physiological, genetic and socio-cultural variables which have been carried out in this northern Adriatic island. In the connection with this extensive anthropological study of the population of the island of Rab the present work aims at describing main geographical, historical, economic, demographic and migrational factors that have directly or indirectly influenced the formation of the island population structure.

The Island of Rab

The island of Rab belongs to the Kvarner archipelago, or the group of islands of the northern Adriatic. Geographically, it is placed between 44° 40' and 44° 51' of northern geographical latitude and 14° 40' and 14° 53' of east geographical longitude from Greenwich²³. Its size of 90.84 km² makes it the fourth largest island in Kvarner archipelago and ninth in size among all of the islands in the Adriatic sea. Together with the surrounding small islands and reefs Sveti Grgur (St. Gregory Island), Goli otok (Barren Island), Maman, Šailovac and Sridnjak, Veli and Mali Laganj (Large and Small Laganj), Dolfin, Trstenik, Sveti Juraj (St. George Island), Dolin, Mišnjak and

Lukovac make up the Rab archipelago²⁴. It is surrounded by the mainland in the east, the island Sveti Grgur (St. Gregory) and the Goli otok (Barren Island) in the north-east, the island of Krk in the north, the island of Cres in the west and the island of Pag in the south. The island of Rab stretches in the northwest-southeast direction in a length of 22 km, parallel to the mainland of the sub-Velebit coastal region from Cape Sorinj in the northwest to Cape Glavinj in the southeast. The width of the island is very inconsistent, ranging from only 3 km in its southern part up to the widest 10 km in its northern part from Cape Šilo in Lopar up to Cape Kristofor in the northwest of the island²³. The Velebit channel divides the island from the mainland (the smallest distance from the mainland on the farthest southeastern part of the island is 1.8 km), the Rab channel divides it from the islands Sveti Grgur (St. Gregory Island) and Goli otok (Barren Island), the Senj gate divides the island of Rab and the island of Krk, whereas the Kvarnerić (the body of sea located between Cres, Krk, Rab and Pag – the little Kvarner) divides it from the islands of Cres and Lošinj in the west and the Pag channel from the Island of Pag in the southeast²⁵. (Figure 1) The relief of the island of Rab is of zonal structure. It is built of limestone, flysch and sandstone. It is characterized by a reef-valley relief structure. Two main limestone zones are Kamenjak and Kalifront. The limestone reef Kamenjak (called Tinjaroša, from the Italian word Tignarossa) is the highest and the largest reef unit which represents the anticline. It stretches from the most southern point of the reef Gavrančić up to the most northern point of the reef Sorinj with the highest peak Straža (Štander, Kamenjak) of 408 meters. Kamenjak is a natural barrier which, stretching from the most northern to the most southern point of the island protects Rab from negative climatic influences pouring from the mainland, particularly from the cold and stormy winds. Kalifront is the slope at the southwest part of the island, it is significantly lower than the Kamenjak (92 m), and it stretches from the reef Frkanj where it descends into the sea and emerges again as the island of Dolin. On the Kalifront limestone plateau there is a reservation of forest vegetation named Dundo, with a well preserved forest of holm oak²⁶. The main flysch area is the most important agricultural area with the most valuable agricultural fields on the entire island (Supetarska draga, Kamporsko polje, Banjolsko polje). It consists of a mid-flysch hillside that divides the two longitudinally placed valleys. Along with these two zones, on the northeast part of the island the Lopar peninsula stretches, also built of flysch marl and sandstone with a fertile Lopar field^{26,27}.

Climatic and Waters

A favorable Mediterranean climate reigns the island with mild winters and pleasant, moderately warm summers. Average air temperature during January is about 6.7°C and in July 23.2°C. Mean annual temperature is 14.5°C, insolation amounts to 2417 sunny hours annu-

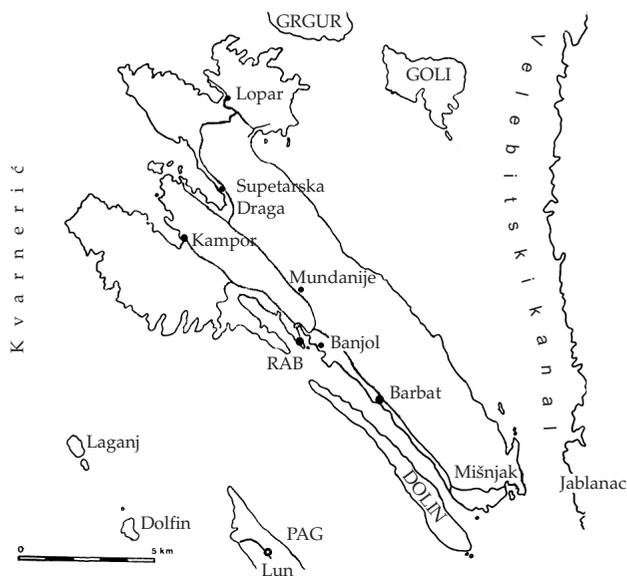


Fig. 1. The island of Rab and disposition of its settlements.

ally²⁸, while the mean relative humidity lies around 68%. Average annual precipitation is around 1.100 mm. Rab has always been known as an island with the largest number of wells of drinking water. Kamenjak and the lower Kalifront are dry, with no springs or flows, while the mid-flysch zone, and particularly the Lopar peninsula have an abundance of sweet water springs which are being used for water supply. On the Lopar peninsula itself there are around 30 of those springs and in the mid-flysch zone over 200^{25,26}.

Vegetation

The island of Rab is one of the greenest islands in the Adriatic, forests covering around 40% of its surface. When compared to the size, only the island of Mljet is better forested than Rab. The entire island was once covered with forests, except from the steep northeastern slope of Kamenjak, which was exposed to the bora wind and sea salt. Clearing of the watertight flysch zone the natural forest vegetation was replaced by agricultural surfaces, bush and smaller forests. The hill of Kalifront has the richest vegetation, which also represents the largest forest complex of the island and the main area for pasture of smaller livestock. Its most beautiful part, the forest Dundo is placed under special protection as a natural reservation. It contains, for the time being, the largest area planted with holm oak also known as »holly oak« in the Adriatic²³.

Economy

Until the end of the 19th century, policultural agriculture was predominant on Rab. Aside from the cultivation of cereals, the most important money flow came from cattle breeding (small livestock) through pasture on the

Kamenjak, using the free pastures neighboring islands (Sveti Grgur and Goli otok) during the summer. The sheep tending of the island of Rab found its response in the maritime terminology of the western civilizations. A sort of cloth from simple wool and of brown color, which in the old days served not only as footwear to seafarers but also the material out of which tents were made, the French seafarers from 15th to 17th century call herbage, the Spanish erbase, the Venetians arbascio and in the Latin of the Middle Ages it was called arbas(i)us. This is how the Frenchman Jal recorded it, the father of the first comparative maritime terminology in the Mediterranean. Linguists agree that this word is a derivation from the Italian name for our Island Arbe. The word, according to this, means »the wool of Rab«, because it was produced on the island of Rab²⁹. Fishing was also developed, and in the past fishing for tuna was the most important form of fishing, while the hunt for mackerel was the main sea game in the intervals of its appearance. Along with fishing, trading of salt, silk, forestry and trading in general with the mainland was developed. Towards the end of the 19th century wine grape superseded other cultures and trade, which was concentrated in the town of Rab grew stronger. The phylloxera plague hit the settlements of Rab and breeding of small cattle subsided in the beginning of the 20th century. Tourism appeared as the new, strong branch of economy. The first stage of tourism lasts all until the WWI and coincides with the reign of the Austro-Hungarian Monarchy and the establishment of steamship lines which connected the northern and the southern part of the Adriatic. The expansion of the Rab touristic offer followed between the two World Wars. In this period, a large number of the hotels and villas were opened, and other gastronomic establishments were set up as well as bathing areas and the touristic activity is extended onto the Lopar area. The third stage of touristic development starts after the WWII within the former Yugoslavia, at which time large tourist settlements and car-camps are built on the island. Touristic turnover is recorded in each settlement on the island, except for the one called Mundanije. The largest tourism turnover is achieved by Lopar, followed by Rab, which includes Palit, Suha Punta, and finally by Banjol. Tourism has, in its modern development of the island, become the main factor of the socio-geographical transformation of the island and has surpassed all other forms of economy existing on Rab. It has also had influence on the natural and socio-geographical constituents of space: the countryside, the settlements and the inhabitants³⁰.

The Population History of the Island of Rab

The Greek geographer Pseudo-Skylax (6–5 century BC) in his work »Periplus« mentions the islands Rab and Pag under the name Mentorides, along with Elektrides and Skardounos thus using one of the three prehistorical names for the groups of islands into which Rab belonged. This name was also used in documents on Liburnian islands. Ptolemy (Claudius Ptolomaeus) a Greek mathe-

matician, geographer and astronomer in his work from the second century entitled »Geographia« mentions the island Scardona on which two towns are situated: Arba and Collentum, but his claim has later been proven incorrect. The Greek writers Heccateus of Miletus and Pseudo Scimno from the second century BC, Pliny the Elder (Gaius Plinius Secundus), the roman naturalist and writer (23–29) in his work »Historia Naturalis« mentions the island of Rab under the name of Arba. The name itself probably derives from the Illyric word Arb which means dark, green, forested, which is even today an important feature of this island. The oldest monument in the town of Rab with the name of Arba mentioned, is the Roman stone inscription from the end of the 1st century BC in which it is mentioned that the emperor August had the town walls and towers built. Later, since the 1st century more Greek and Roman writers mention the island. The Byzantine emperor, writer and historian, Constantine Porphyrogenitus (912–959) in his work »De administrando imperio« mentions Rab under the name of Arbe (this form was later taken in by the Italian language), and in later latin documents the names Arbia, Arbiana, Arbitrana and Arbum^{2,3} are mentioned. Roman presence is best witnessed by a large number of Roman toponomastic forms of which Rab has the most from all of the Croatian islands and the names of the settlements are also of Roman origin. On the chart of the Venetian cartographer Battista Agnese from 1542 the island of Rab is mentioned as Alib. Its modern name Rab probably has from its Illyric or Liburnian name Arba, which has an Indo-European root arb, meaning austere, dark, forested, which is also the modern feature of the island. The Croatian people have adjusted this word to their own language, and turned it into the Croatian name Rab, in which the so-called Slavic liquid metathesis is **ar** > **ra** contained²⁹. The first mention of the name Rab is to be seen in a document on the foundation of a Franciscan monastery of St. Euphemia in Kampor in 1446. On the island of Rab there are 25 prehistorical archeological sites: 9 hill-forts, 10 hummocks, 1 cemetery on a plane and 2 underwater sites, or in other words 1 site from the Paleolithic, 1 from the Mesolithic, 3 from the Neolithic, 1 from the Eneolithic periods, 3 or 4 sites from the Bronze Age and 13 sites from the Iron Age³¹. On the entire Croatian territory so far 50 localities are known on which early material evidence of the Paleolithic and Mesolithic Cultures were found. Out of this only two localities (Lopar on Rab and Veli Rat on the Island of Dugi otok) are situated on islands³². On the Lopar peninsula, which encompasses the northwestern part of the island of Rab and whose geological makeup has conditioned a particular morphology of the terrain and the indentedness of the coast archeologists Mirko Malez and Šime Batović have confirmed the existence of a Paleolithic archeological site. The highest accumulation and concentration of Paleolithic artifacts is on the northwestern part of the Lopar peninsula, more precisely in the area of the rich drinking water spring, not far from the Zidine cape. It is most likely that exactly on this terrain, near the water spring a prehistoric settlement was situa-

ted³². The oldest inhabitants of the island of Rab known by their name was the Illyric tribe Liburnians who lived in the region from the river Raša in Istria to the river Krka (9th–1st century BC). They dwelled on higher hills and near fertile planes and until this day 9 Liburnian settlements have been found on Rab. It was most probably in their time that the first settlement was founded exactly where today's town is situated, carrying the name of Illyric origin, which described the forest-covered, dark and green character of the island³³. Greek advances into the Adriatic caused the common disputes between the Liburnians and the Greek. The fleet of Dionysius the Younger fought the Liburnians somewhere between the islands of Rab and Krk in 365 BC which ended in great defeat for the Liburnians. In order to protect the forts and settlements in southern Adriatic, Dionysius the Younger started establishing small military forts and camps in the northern Adriatic. Traces of Greek objects on Rab can be found even today, at the ruins of St. Damian just above Barbat, at the Walls on the Lopar peninsula and cape Kašteli in the Kapor bay^{23,34}. Their colonization followed the locations of old Liburnian settlements. In the second century BC the Liburnians accepted the Roman rule and the process of their Romanization started. The island of Rab received the municipal status very early (in the 1st century BC), through which it gained communal independence and had a system modeled on the Roman³³. The Roman emperor Augustus Octavius awarded Rab in the 10th century BC with a right of building additional town walls, on which an inscription is preserved. Monuments from the Antiquity confirm that Rab has lived periods of flourishing and ascent. The inscription »Felix Arba« (the happy Rab) is inscribed on a small amphora from the times of the emperor Septimius Severus 2/3 century AD, is the confirmation of the official title of the town but also the reflection of the true wellbeing found there. Only the towns of Rab and Salona had the epithet *felix*. This word epitomizes glory, ascent and prosperity or thankfulness for certain achievements, which is a foundation for the presumption that Rab played an important role at that time. During these lucky times many public buildings were built and temples and monuments put up, and in 174 AD the freed slave Gaius Recius Leo built the town's water-supply (aqueduct) and the public fountain. The basis of this welfare is hard to determine with certainty, but surely it is safe to presume that cattle breeding and traditional Mediterranean cultures had a significant share in the economy supported by trade. In the late Antiquity period, 4th and 5th centuries, Christianity appeared in the town of Rab and the first catholic sacral buildings are constructed: the cathedral of St. Mary and the monastery of St. John the Evangelist and a church outside the town. It is at this time that Rab also receives a diocese and with it the first new urban center around the cathedral and the baptistery. There is a local legend, the main character of which also lived at this time. According to this legend, among the first Christians on Rab was the stone-mason Marin who, being pursued, escaped from Italy to Rab where he founded a settlement upon which later the Republic of

San Marino was founded³³. Rab, along with the entire Dalmatia in 493 fell under the rule of the Ostrogothic King Theodore (471–526). The ostrogothic rule was short-lived, and during its reign the Bishop of Rab took part on the church synods. According to the church councils held in Salona in 530 and 533 the first well-known Bishop of Rab is mentioned, a bishop by the name of Titian (»Ticyanus episcopus sanctae ecclesiae Arbensis«)^{34,35}. After the short Ostrogothic rule in 535, the Byzantine king Justinian (527–565) returns Dalmatia and the island of Rab by defeating the Gothic king Totila (541–552) under the Byzantine rule. During his reign, defense forts in Kapor and Barbat were constructed. Slavic colonization of the island did not leave written historic trails. The destruction that came along with the Avaric-Slavic invasion in the 7th century was avoided only by towns in the mainland coastal regions Zadar (Iadera) and Trogir (Tragurium) and on the islands – Krk (Curicum), Omišalj (Fultinum), Osor (Asporus) and Rab (Arba). The Slavic newcomers lived at first keeping away from the local inhabitants. As farmers and cattle breeders, they did not inhabit the confined spaces of fortified towns of Antiquity but spaces near pastures and surfaces adequate for agriculture. This is how it came that the Slavic migrants lived alongside but detached from the native Roman inhabitants. When Byzantine rule in the Roman towns began growing stronger, Roman refugees, who had formerly left the island, leaving for the nearby Exarchate of Ravenna came back to the island of Rab. Their return to Rab meant the beginning of a cohabitation of the two populations, the older Roman and the younger Slavic³⁴. The oldest data on population density originate from the work »De administrando imperio« (mid 10th century) of the Byzantine emperor, writer and historian Constantine Porphyrogenitus. According to the emperor's criteria, Rab was at that time an inhabited island, which in fact means that it was inhabited by Romans. Unlike Krk, on which only one inhabited town is mentioned, Rab and Osor were probably considered completely Roman³⁵. The emperor's meager reports are filled in by toponomastic researches which show that on Rab there was no significant Croatian (Slavic) ethnic group all until the end of the 10th century. Etymologist Petar Skok has determined that Rab unlike other islands in the Kvarner archipelago has not a single settlement of a Slavic name, i.e. that all the settlements founded thus far carry Roman names²⁹. On the island of Rab there are no other settlements aside from the town of Rab and on the neighboring islands Krk and Cres the Croatian migrants have organized their territory through »castles«. The fact that the island was organized in only one Roman municipality even though the terrain offered other possibilities (the divided area of Lopar), tells the truth on the weak intrusion of the Croatian element from the mainland. Apart from this, there are no earlier monuments in the glagolitic script which can be found on the islands of Krk and Cres. Since the 9th to the mid 11th century the inhabitants of Rab live under the rule of Byzantium as part of the Byzantine theme (Byzantine province with military presence) Dalmatia. During the Byzantine rule on Rab, an autonomous mu-

nicipal community existed the head of which was the Prior, elected every five years. The urban inhabitants of Rab were differentiated in the Byzantine times and was divided into: *cives maiores et minores*; i.e. *cives nobiles et ignobiles*³⁶. Since the times of the emperor Basilius I (867–886) Rab also paid a tribute amounting to 100 gold pieces to preserve the autonomy, peace and the freedom of sea voyage, which is witnessed by a text in the 30th chapter of the work »De administrando imperio« of the Byzantine emperor Constantine Porphyrogenitus. The Bishop of Rab has taken part in the church councils in 925 and 928 in Split and at the 928 council, the Rab diocese was expanded onto the entire island of Pag and part of the neighboring mainland towards the mount Velebit. The Rab diocese was abolished in 1828, when Pope Leo XII appended it to the Krk diocese. Around year 1000 Venice was growing stronger and stronger on the Adriatic, and at the time of conflict of Byzantium with the Macedonian ruler Samuil, then emperor Basilius II asked for help from the Venetians and had in returned given up his formal authority over the Kvarner islands to them. The Venetian Doge Peter II Orseolo in the year 1000 takes over Dalmatian towns and islands, Rab among them, and in 1018, his successor, the Doge Otto Orseolo received a promise made by the people of Rab that they will stay loyal to them and pay a tribute. This important document by which Rab acknowledges the rule of the Venetians, contains one peculiar article which gives us an insight into the economy of Rab. The islanders have obliged to pay a tribute in no small amount of silk (unlike the people of Krk and Osor, who paid in marten and fox fur). Having in mind that back then, the production of silk was still a Byzantine emperor monopoly, there were only two ways in which the people of Rab could obtain it: either through a developed trade with Constantinople, or through their own production, which would mean that Rab was the first place outside the very center of the empire in Europe where silk was produced³³. Out of the 18 names appearing in the document dated 1018, only two are Slavic and all other Christian, Roman or Greek. The percentage of the Croatian people was probably until the mid 11th century, and maybe until even later date, still lower than was the case on Krk or Cres. The reasons for such differences among the islands of the Kvarner archipelago are to be sought in the low population density of the neighboring mainland as well as in the closed nature of the political organization of the island. Opposite Krk lies the town of Vinodol, opposite Cres lies the Istrian peninsula and opposite Rab, a more rarely populated area of coastline beneath the Velebit slopes is situated. On the other hand, the island if Rab made up one political unit, i.e. municipality which could have created an obstacle for a possible settlement on the mainland³⁵. Rab is under Croatian rule again during the times of the king Petar Krešimir IV (1058–1074). Important historical documents from the 11th century are mostly related to the affirmation of the Benedictine order on the island, simultaneously providing us with data on a growing presence of the Slavic population in the island's life. In 1059, then Bishop Drago asked the Ben-

edictine order to come to Rab and gave them a large estate and the churches of St. Peter and St. Cyprian in Supetarska draga. This gift charter was later in 1070, confirmed by the king Petar Krešimir IV. The same year, the king bestowed the church of Rab with significant privileges, confirming thus its jurisdiction over the church parishes of the neighboring mainland towards the mount Velebit and over one part of the island of Pag³⁶. Towards the end of the 11th century Dalmatian towns became politically disunited, a fact which was used by the Normans, whose naval force invaded Rab at two occasions in 1075³⁷.

Since the beginning of the 12th century all until 1409 the island of Rab was under the Croatian-Hungarian rule and the rule of the Venetian Republic interchangeably. Extinction of a Croatian dynasty, the Croatian territories were at first ruled by the Arpadian dynasty which was followed by the Anjou dynasty. Delegates from Rab also bowed before king Koloman of the Arpadian dynasty at an assembly near Zadar in 1107. Rab was very soon appropriated by the Venetian Republic and remained under its rule until 1385. The Venetian Doge Ordelafo Faledro recognized the privileges Rab had had during the Byzantine emperors and Croatian kings. Political, administrative and economic areas of life were determined through the most important communal document, the Proto-statute of Rab, the earliest document of this kind in the eastern Adriatic. The first monument witnessing to it dates back to the 1234, but it is considered that the final version was written between 1325 and 1327. Its copy from the year 1597 made by the notary Giovanni Antonio Cernotta is preserved, and it was copied at the request of Captain Lorenzo Micheli³⁷. In the period between the 12th and the 13th centuries the Byzantine term prior disappeared in Dalmatian towns, and also on Rab, and the main person of the island life started to be called comes (duke), in whose administration the indirect rule of the Venetian Republic is felt, more than the local autonomy. Alongside the comes, the function of iudex (judge) appeared, whose person represents the people of Rab. At that time, the inhabitants of Rab were divided into *nobiles* (*maiores*) i.e. the nobility and the *ignobiles* (*minores*) i.e. the common people³⁸. During the reign of king Bela IV (1235–1270) the island of Rab briefly became a constituting part of the Croatian state. The Mongolic invasion of Croatia in 1242 brought on a large migration wave, thanks to which many refugees fled the mainland to Rab, the Bishop of Zagreb Stjepan II, among them together with the church archives of the Zagreb Kaptol. When the Mongolians suffered a defeat at the Grobnik field, and the conditions in Croatia calmed down, the refugees returned from Rab to their native regions, but still, a significant number of this new population remained on the island³⁴. The 12th and 13th centuries represent a time of economic prosperity, as can be seen from the intensive construction activities, which mostly coincide with the Romanesque period. As the most monumental the bell-towers of the cathedral are erected, that of St. Andrew and St. John the Evangelist in the town of Rab. The lat-

est migration stream inhabited the island in the 14th century, mostly due to its wellbeing and economic development. Toward the end of the Golden Age of Rab, the town society gradually assumes the structure which is also found in other towns of the European Mediterranean region. In the 14th century the final formation of the Rab community takes place, as well as the founding of class organization of the Rab society. The authorities of everyday city management are the duke (comes) and three judges, all of which make up the curia (curia), a committee of the »twenty wise« (viginti sapientes) and a Large Council consisting of 100–120 members, half of which were from the ranks of the nobility and half came from the common people. Exactly this custom of electing wealthy citizens into the Large Council is a feature characteristic of Rab and when compared to other Dalmatian town municipalities the Large Council during the 14th century is made up solely of nobility³⁸. Aside from this fact, Rab remained a unified municipality despite the increase in population numbers which also extended outside the island onto the neighboring island of Pag and the surrounding islands (for example, the Goli otok/Barren Island and Sveti Grgur/St. Gregory Island)³³. The people of Rab also spread onto the sub-Velebit region. The town of Jablanac was founded and developed already in the 13th century, which was probably induced by the migration of the Rab population. The bill of Ban (governor) Stjepan Šubić from 1251 by which Jablanac was given certain privileges. The most important district of Rab was the northern part of the island of Pag, over which Rab would battle Zadar for centuries. The people of Rab also became proprietors of the island Trstenik in Lošinj's archipelago. From all of this, one can conclude that Rab was the most vital island in the early Middle Ages. Aside from the repressive continental factors influencing the demographic development and uprising of Rab, particularly in the 14th century, an additional influence was the economic prosperity of Rab. Regardless of the fact that there are no accurate data on the ethnic makeup of that time, it is safe to claim that Rab has formed a Roman settlement become more and more Croatian³⁹. Of the presence and increase of the Croatian entity within the Rab community, numerous written documents are witness dating from 1166, 1237, 1315, 1334 and 1335. From those documents an increasing number of Croatian names is visible, which as time goes on, become more and more present³⁴. Ludovic I in 1358 drove Venice out of Croatia and Dalmatia, bringing to the head of town authorities noblemen, among which also the Šubić and Frankopan families³³. The rule of Croatian-Hungarian kings lasted until 1409, when the island again became part of the Venetian Republic, under the rule of which it remained until its fall in 1797. Rab's progress was rapid during the Middle Ages and towards the end of the 15th century the island recorded the largest population, around 10 000, out of which in only 5000 lived in the town itself³⁶. Two large plague epidemics in 1449 and 1456 caused a high mortality and a depopulation of the island. Kaldanac, the oldest, most southern part of the town of Rab was almost completely deserted. At the time these epidemics occurred, the population was

leaving the island, fleeing for the mainland or the neighboring islands Krk and Pag. Around the mid 15th century, as consequence of Turkish conquests, particularly after the fall of Bosnia in 1463 large-scale migrations of the population from the mainland started (from Bosnia, and the Lika and Velebit region) to the island of Rab. The Venetian authorities bestowed the migrants with privileges, freeing them from paying tribute, so that they would settle faster and organize their own estates. The newly arrived migrants the people of Rab moved to their estates outside the town where new settlements were formed³⁴. It is at this time that the settlement of Lopar lived to see significant development. The newly arrived population continued the old agricultural-cattle breeding tradition of which the settlements with patronymic-cooperative names are witness⁴⁰. In 1538 Venice finally decided that the town of Novalja with Lun on the island of Pag is to become part of Rab. What Omišalj was in the northern part of the Kvarner island, was the position of Rab in its southern part. It was situated opposite the old resistance core, the town of Senj, and lived as a military settlement – castrum. It was the responsibility of the people of Rab to monitor the largest part of the Canale della Morlaccia (Sub-Velebit channel). In the 16th century, under Venetian rule, the first reports on the number of Rab's inhabitants appeared. The first statistical information on the population of some settlements of the islands of the Kvarner archipelago date back to 1525. Namely, it is the visitation time of L. Venier and H. Contaner, who report of a working, male population (»homini da fatti«). Around 800 inhabitants are mentioned to have lived on Rab at that time. This data on the Rab population seems real, since the average taking part of this population in similar populations through ponderation a number of 3400 inhabitants is obtained. In 1553, G. B. Giustinian in his work »Itinerario« stated that there were 3500 inhabitants on Rab, while it is interesting to notice that he numbered only 300 houses, which would mean that some houses were home to 12 family members. Most likely, this is in fact the number of houses in the town of Rab itself, while the number of inhabitants refers to the whole island community. A. Diedo would in one long interval (1553 and 1571) provide an approximate but probably pretty real number of inhabitants of the Rab area, which also amounted to 3500 inhabitants, out of which 800 were capable to work. In 1559 two visitors M. Bon and G. Erizzo gave somewhat credible data on the number of inhabitants and the inhabitants working actively: 3143 inhabitants and 692 workers. This data can be accepted due to the fact that these visitors are one of the rare demographic informers speaking of explicit counting of inhabitants. A. Giustiniani and P. Valier would once again conduct a population census on Rab in 1576. Their numbers would be the lowest thus far, since according to them the island would number 1619 inhabitants (the town and four adjoining villages; Giustiniani mentioned that the villages of Rab number 858 and the town of Rab 761 inhabitants). Regardless of the fact that this number does not refer to the entire Rab area, a strong depopulation is visible, because the areas belonging but outside

the island itself never made up for even a fourth of the entire territory. The depopulation of Rab's inhabitant figures would be confirmed in 1591 by F. Nani and P. Valier. Their demostatistical data differ. The former probably took into consideration only the island which had 2400 inhabitants, and the latter, so it is supposed, probably only gives data on the town of Rab given that he reports only 1047 inhabitants. Some of the common users of demographic data were the island dioceses, and so the Rab diocese conducted a census of its inhabitants in 1638. These censuses can be regarded as more reliable because they were compiled by summing up the numbers of parishes of one territory and the »census circles« are by far more proximate and known to the local clergy, than is the case with visitations of Venetian representatives. On this occasion, the Rab diocese was determined to number 3139 inhabitants. Three years later, the general providur (governor) asked the Duke of Rab and the Captain to report on the demographic status of the island and the number of cattle. 1641 he sent back data containing the structure, most probably of the inhabitants of the town of Rab, which numbered only 1842 inhabitants in total. The valuable character of this report is data on men older than 50, which numbered 151, men of age 18–50 of which there were 294 registered and younger population of men up to the age of 18 which totaled 476. The only data available for women reports that there were 921 female inhabitants. Such structure gives information on exceptional youth of the population in Middle Ages, for in fact over 50% of the population was younger than the age of 18 and about 18% was older than 50 years of age, which indicates a high mortality. This report can also be accepted as an objective one, because it is directly corroborated by Corolelli's data from 1685 reporting on 2000 inhabitants. Based on methodological, various, rare and timely unstandardized demostatistical data, when recapitulating the demographic development of the Kvarner islands in the first period of Venetian rule, we can conclude: at that time, time of regressive i.e. depopulating development of the island populations; that the depopulation is foremostly caused by a periodically high mortality due to irregular events (wars, the plague, migrations etc.); true enough, birth-rate was high, but the neonatal mortality was high as well so that the biological reproduction was lessened due to a high ratio of clergy in the overall population³⁹. In 1797, with the fall of Venice, along with the rest of Dalmatian region, Rab came under Austrian rule, and in 1805, through the Bratislava peace treaty, came under the French rule, under which the thus far organization of the island was abolished. The French rule on Rab lasted from 1805 until 1813 when Articles of the Vienna congress bring the island back into the composition of the Austro-Hungarian Monarchy under the rule of which it remained all until 1918. The period of French rule was important because at this time the first quality roads were built on the island (the road Rab-Lopar) which improved communication between the settlements of the island. In the 18th century demographic statistics has a stronghold in parochial registration system because all the vital events are recorded

(births and deaths), marriages and communions. Data on number of inhabitants of highest quality of that time was received based on the census conducted in 1781. At the request of the general providur (governor) for Dalmatia Paolo Boldúa, a census of all the settlements of Dalmatia of that time, at which occasion the inhabitants of the upper Adriatic were included. Thus, the total number of Rab's inhabitants (the number of inhabitants also refers to the part of Pag under Rab's authority) amounted to 4287. In the period from 1798–1808 four censuses were conducted. All were conducted and published in the Italian language. Comparing birth-rate among the islands we conclude that it is still very high and evenly spread across the island communities. When discussing mortality, a discrepancy was found on Rab, where the mortality rate even exceeded the birth-rate. This was probably due to a local epidemic because no increase in deaths was observed in the neighboring islands. In the first part of the 19th century, there is an increase in the frequency of conducting censuses and reports on the number of inhabitants of certain islands and their settlements. These were conducted using various methods and for various purposes. They were not conducted in the same time-frames and their results are often difficult to compare³⁸. The first official census of the population was simultaneously conducted on the whole territory of the Austro-Hungarian Monarchy in 1857. On Rab the Austrian statistics registered one settlement as trading point (Rab) and eight villages, with the note that one village settlement refers to the settlement of Lun on the island of Pag. In wake of the WWI and the breakup of the Austro-Hungarian Monarchy, the island population had mostly freed themselves from the colonization, acquired its own land and those who worked some large estate owner's land under colonization terms had already owned some other parcel of land. Such condition is also to be found on Rab, mostly in the settlements of Mundanije, Banjol, Barbat and Kampor, while the villagers in Lopar and Supetarska Draga had already earlier freed themselves of the colonization relations³⁹. In the years following the WWI Rab was under Italian occupation (1918–1920). The Rapal treaty, in 1921 makes it a member of the Kingdom of Serbs, Croats and Slovenes, and since 1929 it is within the Kingdom of Yugoslavia. Since then it remains a part of the Croatian territory, aside from the times of fascist Italian and German occupation during the WWII. The period of the WWII is one of the most bleak times in the island's history due to the fascist occupation from 1941–1943. The fascist Italian rule, set up a concentration camp, right next to the settlement of Kampor, for mostly inhabitants of Slovenian origin from the region of Primorje (coastal region of Croatia) and Istria and for Croatian internees from the Gorski kotar and Istria region. Until the time of Italy's capitulation, as between 13 000 and 15 000 imprisoned people were brought to the concentration camp. Over 4000 people imprisoned there are considered to have died and some 1433 victims' names were inscribed into the memorial board set up on occasion of the 60th liberation anniversary. Following Italy's capitulation (1943) the internees and the people of

Rab disarmed the Italian guards, and formed the Rab Brigade of the National Liberation Army of Yugoslavia with which one Jewish battalion was also active, the only Jewish antifascist military formation in Europe. The island of Rab was occupied in 1944–1945 by German army, and it was finally liberated on April 12, 1945. The uninhabited Goli otok (Barren Island), which belongs to Rab, was used as a large prison for political prisoners in the WWII and the years following its end. The followers of the Informbureau's resolution as well as other ideological opponents became interned on the Goli otok (Barren Island), which kept this prison function well into the later age³⁹. Already in the period between the two World Wars, Rab became a well known tourist destination on the northern Adriatic, and in modern times tourism has become the cornerstone of its economy. The 1960ies were characterized by mass tourism and construction of touristic sites and settlements which take up entire parts of the island: Lopar, Banjol and Barbat.

Demography

According to the 2001 census, the island of Rab numbers 9480 inhabitants, and the population density amounts to 89.5 inhabitants per km², which equals the average density of the Primorsko-goranska county, i.e. it is somewhat higher than the average population density of the Republic of Croatia (84 inhabitants per km²)⁴¹. It is one of the most inhabited Croatian islands, and the only one recording a continuous growth in the number of inhabitants^{26,42} (Figure 2). The first official census was conducted in 1857, at which occasion there were 3589 permanent residents on Rab. At that time, Rab was administratively part of the Dalmatian county, while other islands of the Kvarner archipelago (Krk, Cres, Lošinj) were actually constituents of the Austrian province of Primorje (coastal region) and Istria. In this census, Rab had the smallest ratio of elder population, but not due to the youth of the island, but due to the heightened mortality rate, caused by the cholera epidemics in 1855 which

caused the death of a half of the population on the island. At the beginning of 1855 Rab numbered 4013 inhabitants, while according to the 1857 census, it numbered 3589 or 10.6% less⁴³. On the majority of the islands of the Adriatic sea the number of inhabitants was on the rise until the end of the 19th century, i.e. until the beginning of the 20th century, after which, mostly due to migrations, followed a negative trend of demographic movements. According to the fluctuations in the number of inhabitants since the mid 19th century until today, Rab represents an exception among the islands of the Adriatic. In the period from 1890 until 1900, a slight decrease in the number of inhabitants on the island occurred. It is a fact that at this time phylloxera also occurred on the island, but probably the most important factor for the decrease in the population on Rab towards the end of the 19th century was the fact that some, mainly the representatives of trading oligarchy emigrated from Rab to the towns of Zadar, Šibenik and Trieste where they continued to be active in trade while others switched starting work on administrative jobs or other intellectual occupations which enabled them to enter the government service mostly in Dalmatia (but also on Rab)³⁰. Additionally, in 1895 birth-rate and mortality on Rab were almost equal while in 1896 a negative birth rate was recorded⁴². Generally, with other islands of the Kvarner archipelago, an increase in the number of inhabitants is characteristic for the time period all until 1910 but it is slower than in the Kvarner coastal regions and Istria, followed then by a decrease which is recorded all until 1971. In this period, between 1869 and 1910 in all the settlements in the Rab municipality the number of inhabitants has grown, and the increase in that period amounted to 29%³⁰. Basic characteristics of the demographic period during Austrian rule were a mild increase of the population, all until the WWI, initial hints of demographic transition which mainly manifested itself through a decrease in mortality with a milder decrease in birth-rate, while in mechanic movements of the populations oversea migrations prevailed, but also migrations of foreigners primarily re-

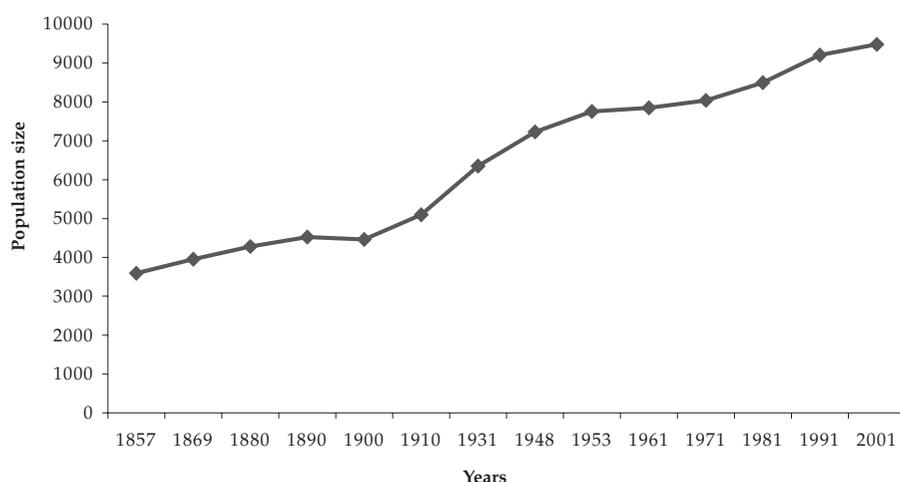


Fig. 2. Population size on the island of Rab from 1857 to 2001.

lated to tourism and other services³⁹. WWI and the period immediately following its end, will have an important effect on the mechanic movements of the population. The Rapal treaty gave Italy rule of Cres and Lošinj, and in spite of D'Annunzio's attempts to violently annex Rab and Krk, these islands remain under the rule of the Kingdom of Serbs, Croats and Slovenes. Due to Italian occupation, a census conducted in 1921 on other Kvarner islands was not conducted on Rab so that data available from the 1910 census for Rab were copied into the new 1921 census. Regardless of this great demostatistic lack, the 1921 and 1931 census results show that the northern part as well as other Adriatic islands entered a long-term depopulation phase. The basic cause for this decrease in population numbers was massive migration, particularly to overseas countries. The index of overall population numbers change is impressive for Rab, but due to the methodological incomparability, it actually refers not to the year 1921 but to 1910. The 1931 census confirms an exceptionally upwards-going demographic stage, while the neighboring Kvarner islands of Krk, Lošinj and Cres recorded outward-migrations of their populations; Rab recorded a positive demographic balance. In 1929, the Rab and Pag municipalities make up an integral county authority, so that the census actually presents these two islands as demostatistic coverage of the Rab County. The administrative-juridical aspect of the organization of the island of Rab from the year 1938 is also interesting, when the island was divided into the municipality of Rab and the municipality of Rab villages. A census conducted in 1948 covered the population of the island of Pag as belonging under the Rab county, so that data for these two islands cannot be diversified. However, it is evident that the islands of Rab and Pag had the highest ratio of resident inhabitants (96%). The 1953 census confirmed the post-war demographic processes, with an important feature being a strong depopulation of the Kvarner islands from which only Rab was exempt. The growth rate of 11.6% is a reflection of the compensative war birth-rate, but also of positive migration balance. The positive migration balance on Rab has also in this time period, as well as the higher quality diodynamic processes are related to the relocation of numerous guards and administrative staff for the functioning of the prison on the Goli otok (Barren Island). According to the 1971 census, Rab was the only island of continuous demographic growth and the 1981 census showed that the island of Rab had the smallest ratio of migrant populations in the overall population (30.1%). Rab recorded the largest ratio of intra-island migrations (51.8%), which was followed by migrations from all over Croatia (34.5%). Censuses conducted in 1991 and 2001 again confirmed that Rab records the most prominent intra-island redistribution of the populations. Namely, almost half of its inhabitants that have changed their place of residence actually originate from some other settlement on Rab³⁹. Having in mind the specific gender structure of the population on the Croatian islands, where even today women prevail, the Rab microregion is an exception with the higher number of male population, so the 1981 census, while in

the last two censuses (1991 and 2001)^{41,45} the number of women on the island has grown, particularly in older age groups, which is a consequence of longer life-span of female population (Figure 3). Despite the fact that the Rab population has grown slowly in all time periods, this growth was actually lower than the natural growth. Table 1 shows the »vital statistics« for the island of Rab during the last few decades (1971–2001). The data suggests a slight increase in mortality, particularly for the 1991–2001 period (from 7.93% to 11.49%) and an indicative decrease of birth-rate from 1971 until 2001 (from 16.04% to 7.48%). The 2001 data show a negative demographic trend for the island of Rab: from the highest decrease in birth-rate, over the highest mortality rate to negative natural growth on the island (–38). According to this data, the island of Rab obviously did not manage to avoid the general demographic streams on the Adriatic islands, but has successfully resisted out-migration through its fertile soil, water and agriculture–cattle economy, to which in the latest period a stronger connection to the coast and intensive touristic valorization of space has also contributed⁴⁶.

The surnames of Rab

When comparing the surnames in the first five christening books from 1869 until 1676 with the list of surnames in the town of Rab and the Rab villages, which was published in 1926 by professor Lucijan Maričić⁴⁷, one notices that many surnames have become extinct until today, while others have changed, and yet many have almost in their original form survived for almost four centuries:

Antulić, Bakota, Bačić, Benić, Blagdan, Brnabić, Bolković, Borić, Debelić, Dedić, Deželjin, Dominis, Frančić, Galzinja, Godinić, Guščić, Juras, Kaldana, Kaločira, Kaštelan, Krstačić, Kukulić, Kurelić, Lemešić, Lušić, Makarunić, Marijan, Marinelis, Mersić, Miknić, Miš, Mlacović, Nimira, Paštrović, Pende, Pereza, Robić, Spalatin, Semitekolo, Stančić, Staničić, Sović, Šimičić, Španjol, Šubić, Šurlina, Tomičić, Tomić, Tomulić, Tonsa, Tonšić, Valentić, Zec, Zudenigo, Žigo, Žintil.

Following the WWII, the extinction of oldest Rab's surnames continued and so the beginning of the 19th century and the year 2001 in the town and the island of Rab did not live to see the noble surnames of *Galzinja*, *Marinelis* and *Nimira*, the descendents of which today live in other towns in Dalmatia or in larger towns in Croatia, most of them are in Italy, and the USA. Old civic surnames and common people's surnames are also extinct: *Juras*, *Mersić*, *Paštrović*, *Robić*, *Valentić* and *Zec*, and some descendents of these old surnames of civic families and common people's families we can find today in Rijeka and Zagreb but also in Zadar, Split and other Dalmatian towns and islands⁴⁸.

The settlements of Rab

Unlike other Kvarner islands, which are characterized by a relatively large number of settlements, the island of Rab as a unit of local authority has a relatively

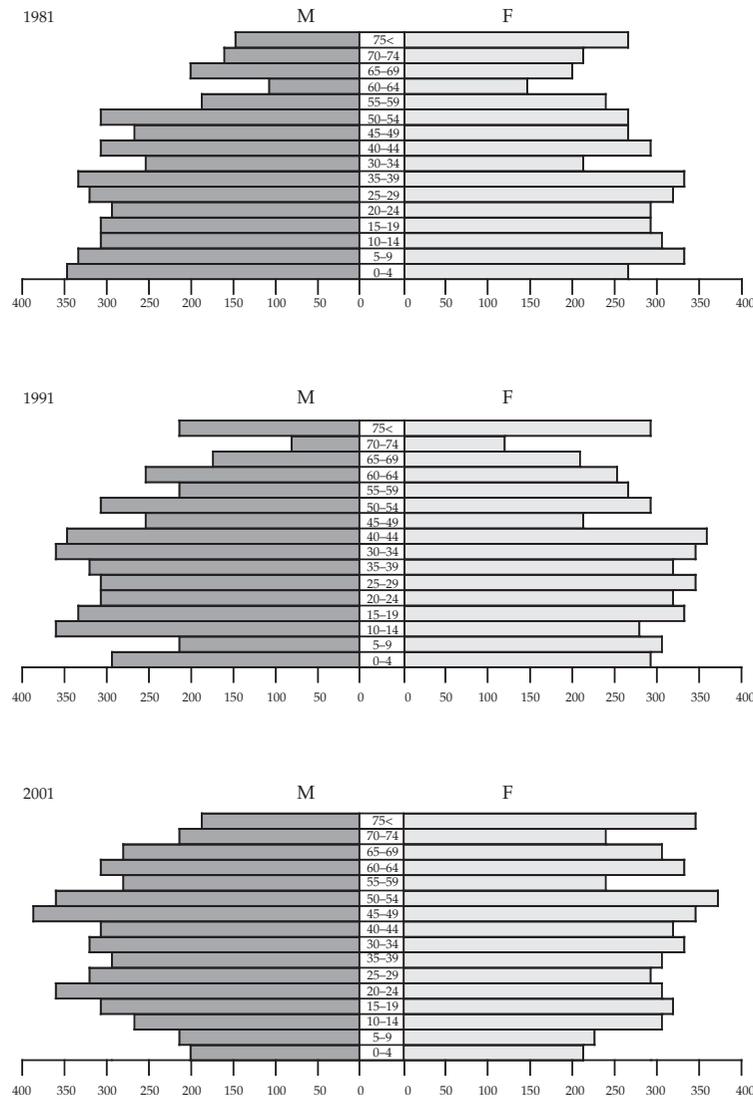


Fig. 3. Population distribution of the island of Rab in 1981, 1991 and 2001 according to age and sex.

small number of settlements. As part of the town of Rab there are only 8 settlements – Banjol, Barbat, Kampor, Lopar, Mundanije, Palit, Rab and Supetarska Draga (Figure 1). Rab is the administrative centre. Since the 11th century and all until 1992, the peninsula of Lun, on the most northern part of the island of Pag belonged to Rab. Since 1992 it has been a constituent part of its native island of Pag under the municipality of Novalja. A relatively small number of settlements represent a specific character of Rab and Pag in comparison to other Kvarner islands. According to the number of inhabitants from 2001, settlements of the town of Rab can be divided into three groups: settlements with 500–1000 inhabitants: Mundanije, Rab; settlements with 1000–1500 inhabitants: Barbat, Kampor, Lopar, Supetarska Draga and settlements with 1500–2000 inhabitants: Banjol, Palit. The largest number of inhabitants, according to the 2001 census has Banjol with 1944 inhabitants or 20.5% of the total population of the island of Rab and the highest popu-

lation density has Palit with 753.3 inhabitants per km². Villages on Rab did not actually exist through the entire Middle Ages, which can be determined from various descriptions and geographical maps of the island. The people of Rab district lived in houses related to the parcels of fertile land they worked and not in relation to some local centre. The placement of houses depended on the terrain, so that those in Supetarska Draga, Mundanije, Banjol and Barbat were erected on the transitional space between fertile land into the rocky ground. This type of settlements with no central accentuation and on land not differing in height than its surroundings, seems to have no roots in Roman or pre-Roman basis but has evolved significantly later, in the 16th century, and which since its beginning in the descriptions of the island, has come forth as a formed village³⁵. It is characteristic of all settlements on the island, with the exception of the town of Rab, that in their past, they were actually scattered i.e. dispersed and that they in fact consisted of several small

hamlets. Due to this one can say that the village formations of Rab is of hamlet character³⁰. Onto the placing of the settlements themselves a great influence was also the climate and the composition of the underlying surface. All settlements of Rab have formed in places protected from the wind bora, so that they are all in fact facing the southwest, aside from Lopar, which is situated on the flysch, along with the fertile flysch valley or along the sea, with the exception of Mundanije^{26,30}. The majority of these settlements developed from former villages and still today they retain their village-like character formation. These are for example Lopar, Supetarska Draga, Mundanije and Barbat, while Palit and Banjol, as settlements closest to the town of Rab take on town-like characteristic in their formation³⁰. When considering surnames, according to local tradition and language, it is considered that in Kampor, Supetarska Draga and Banjol are migrants whose names we find in the so-called »slovin« Istria, in Lopar are migrants from Baška, while to Barbat the Velebit population had migrated, which can be felt in the Barbat language with plenty of language elements from the štokavian dialect^{40,49}. The development of tourism and traffic leads to desertion of agriculture and a strong development of tertiary and quaternary sector. Economic changes lead to changes in population structure and also to changes in special image of the island's population diversification. New spaces have become more attractive, which at the agricultural times have not been as inviting. A new special division takes place, and a new concentration of population appears, the old (agricultural) settlements away from roads are significantly depopulated and at the same time urbanized cores of settlements alongside roads and harbors grow stronger, particularly in the central part of the island. Banjol, Palit and

Rab, and also Kampor have, to a certain extent, grown together into a practically one urban unit. In 1948 in Banjol lived 961 inhabitants and in 1981 it was already numbering 1677 inhabitants, and has through a constant increase in population numbers reached 1944 in 2001. During the same period Palit (actually a part of the town of Rab) grew from 158 inhabitants to 1554 and Kampor from 951 to 1279 inhabitants. The innermost center of Rab loses the population density it used to have, and the town of Rab records an increase in population since 1961 (1041) only to records a decrease in 1981 to 731 inhabitants and in 2001 it grew even less, recording only 544 inhabitants. Spacial (migration) movements of the Rab population are also seen in other settlements – particularly within the settlements themselves. The old (agricultural) hamlets are slowly going through demographic stagnations, while urban cores of the same settlements, placed alongside harbors and roads, grow stronger. Barbat numbered 138 inhabitants in 1953 and in 1981 only 974 inhabitants, whereas this number has increased again to 1117 in 2001. The number of Lopar's inhabitants was on the increase all until 1961 and in the period from 1961 until 1981 it was slowly decreasing, only to be kept at about 1200 inhabitants in 2001 with smaller variations. There is a similar situation in Supetarska Draga, which records a slight stagnation in population numbers from 1953 until 1971, only to record a constant increase in the number of its inhabitants in the period from 1981 until 2001. The settlement of Mundanije is the only settlement on Rab which is placed away from the sea, and it has been characterized by a strong depopulation since 1948 (1072 inhabitants) until 2001 (512 inhabitants). (Figure 4) The largest number of migrants on the island of Rab has actually moved there from the surrounding

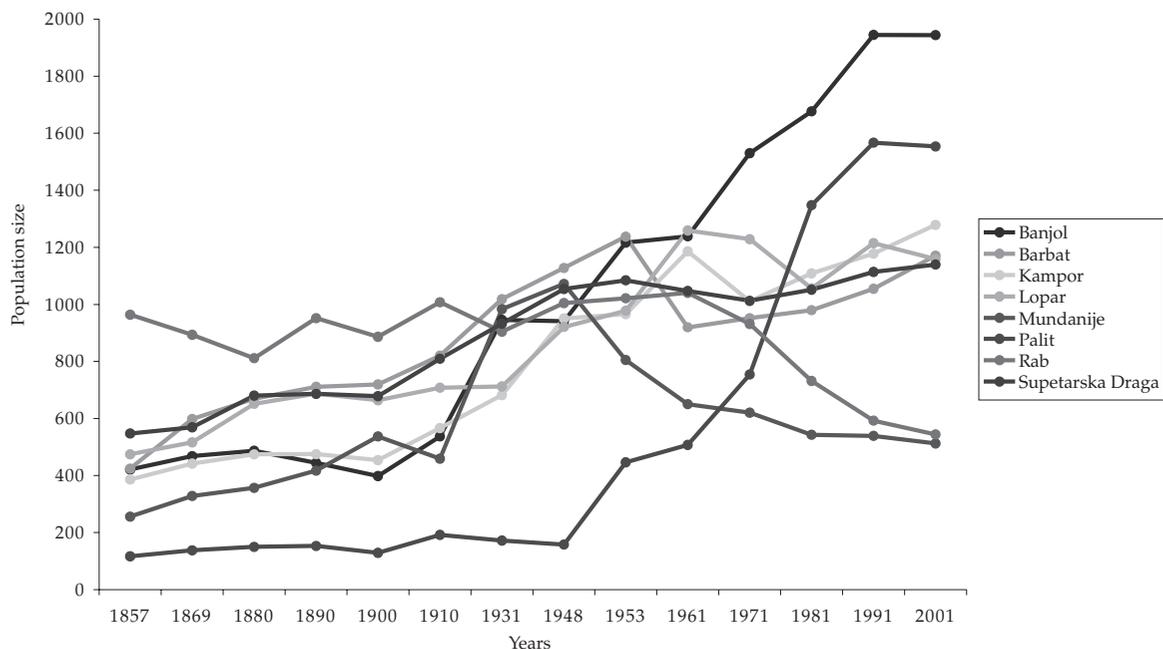


Fig. 4. Population size of the villages on the island of Rab from 1857 to 2001.

TABLE 1
THE ISLAND OF RAB VITAL STATISTICS FOR 1971, 1981, 1991 AND 2001

	1971	1981	1991	2001
1 Total number of inhabitants	8041	8496	9205	9480
2 Number of births	129	120	85	71
3 Birth rate	16.04	14.12	9.23	7.48
4 Number of deaths	74	76	73	109
5 Mortality	9.20	8.94	7.93	11.49
6 Natural growth	55	44	12	-38
7 Vital index	174.32	157.89	116.43	65.13
8 Number of fertile women	2004	1996	2230	2203
9 Fertility	64.37	60.12	38.11	32.22

3 = number of births/ total number of inhabitants × 1000
 5 = number of deaths/ total number of inhabitants × 1000
 7 = number of births/ number of deaths × 100
 9 = number of births/ number of fertile women × 1000

TABLE 2
MIGRATION DATA FOR VILLAGES OF THE ISLAND OF RAB

MOTHER \ FATHER									Oi	Total (M)
	1	2	3	4	5	6	7	8		
1 Barbat	97	3	-	-	1	2	3	2	5	113
2 Banjol	9	34	1	-	-	3	5	2	1	55
3 S. Draga	-	-	54	1	2	1	2	2	1	63
4 Lopar	-	-	1	121	-	-	-	-	-	122
5 Rab	-	-	1	-	47	-	-	-	6	54
6 Kampor	-	5	8	1	-	35	8	2	1	60
7 Mundanije	3	4	5	2	2	1	10	-	2	29
8 Palit	-	-	-	-	-	-	-	1	1	2
Oi	3	2	2	4	12	1	1	1	79	105
Total (F)	112	48	72	129	64	43	29	10	96	603

Oi – parents originating outside the island
 Total (F) – total number of fathers
 Total (M) – total number of mothers

area or from other settlements of the Republic of Croatia. The time of immigrants moving onto the island is certainly indicative, since it corresponds to the tourist upswing of the island. Dragutin Feletar⁴², following the daily migrations during the 1980ies came to the conclusion that the island of Rab lives as one innately connected and urbanized unit, the intensity of Rab's daily migrations is more characteristic of an inner-city area of its working population in large agglomerations, then for settlements of small municipalities such as the island of Rab. The reasons for such daily migrations are relatively small distances between the settlements and a well-developed system of roads.

Migration and Endogamy

Knowledge on historical and current population migrations is important for holistic and anthropological re-

search because migrations have a direct influence on the exchange of the genetic material among neighboring populations. The island of Rab as well as other islands of the Adriatic, on which the Institute for Anthropological Research in Zagreb has over 30 years conducted its research, is interesting for studying the relations between migrations and genetic variations. Field research on the island of Rab conducted in 2002 have encompassed 603 examinees between the age of 18 and 85. Based on questionnaire data on place of birth of the examinees parents a migration matrix was obtained as presented in Table 2 for mothers and fathers, and in Table 3 for both parents in relation to their children – the examinees. Certain elements of the migration matrix give us the number of parents who migrated from one settlement into another. Diagonal matrix elements show the degree of endogamy. It is exactly this data that was obtained in diagonal elements of Table 2 and Table 3 that are interesting, because they show an exceptional degree of endogamy of

TABLE 3
MIGRATION MATRIX FOR BOTH PARENTS COMBINED

		Parent's place of birth										
Children's place of birth	Villages	1	2	3	4	5	6	7	8	Oi	Si	Total
		1 BARBAT	216	8	–	–	–	–	3	1	6	228
	2 BANJOL	4	92	–	–	–	6	6	–	7	108	115
	3 S. DRAGA	–	1	122	1	–	6	8	–	2	138	140
	4 LOPAR	–	–	1	247	–	1	1	–	6	250	256
	5 RAB	1	2	2	1	89	5	4	2	12	106	118
	6 KAMPOR	2	1	3	–	–	70	–	–	2	76	78
	7 MUNDANIJE	3	4	–	1	1	4	46	–	1	59	60
	8 PALIT	5	2	2	–	–	2	1	9	5	21	26
	Oi	2	2	–	–	3	–	2	–	170	9	179

Oi –originating outside the island
Si – parents from 8 analyzed villages
Total – total number of subjects

TABLE 4
STOCHASTIC MIGRATION MATRIX FOR BOTH PARENTS

		Parent's place of birth								
Children's place of birth	Villages	1	2	3	4	5	6	7	8	* α_{oi}
		1 Barbat	0.9473	0.0350	–	–	–	–	0.0131	0.0043
	2 Banjol	0.0370	0.8518	–	–	–	0.0555	0.0555	–	0.0608
	3 S. Draga	–	0.0072	0.8840	0.0072	–	0.0434	0.0579	–	0.0142
	4 Lopar	–	–	0.0040	0.9888	–	0.0040	0.0040	–	0.0234
	5 Rab	0.0094	0.0188	0.0188	0.0094	0.8396	0.0471	0.0377	0.0188	0.1016
	6 Kampor	0.0263	0.0131	0.0394	–	–	0.9210	–	–	0.0256
	7 Mundanije	0.0508	0.0677	–	0.0169	0.0169	0.0677	0.7796	–	0.0166
	8 Palit	0.2380	0.0952	0.0952	–	–	0.0952	0.0476	0.4285	0.1923

* α_{oi} = proportion of parents outside the island of Rab

some settlements on Rab among which Lopar takes first place, as the most endogamous settlement on the island. The migrations of the parents within the island show that a higher number of parents migrated into settlements nearer to their place of birth or into urban centers of the island. The outer columns of Table 2 with the total number of mothers and fathers show the distribution of mothers and fathers according to villages. The distribution of men and women coincides, which is a specific characteristic when compared to other Adriatic islands on which women show a higher degree of mobility in comparison to men. Based on the data shown in Table 3 from a total of 1026 persons of both sexes, 995 are born on the island, while 211 persons was not born on the island region neither their parents (i.e. 82.50% against 17.49%). The ratio of inner migrations is shown using the stochastic matrix in Table 4 for 8 settlements included into the research, which was obtained by dividing of each column of the matrix with the sum of the column. The frequency of immigrants who come from larger dis-

tances is described using the α_{oi} element (systematic pressure) of the stochastic matrix. The ratio of out-of-the island migrations is the highest in urban tourist centers: Rab (10.16%) and Palit (19.3%). High values in diagonals confirm the already mentioned high degree of kinship and show a small degree of migrations among settlements of the island on the child-parent level.

Acknowledgements

The author wishes to thank academician P. Rudan and A. Malnar, PhD for helpful suggestions in improving the quality of the paper, to colleagues D. Vlak and N. Jeran for friendly help with tables and figures presented in this paper. This work is part of the project of the Ministry of Science, Education and Sport of the Republic of Croatia, grant to academician P. Rudan (Project: »Population structure of Croatia – anthropogenetic approach«, grant No. 196-1962766-2751)

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ETNOPOVIJESNI PROCESI I DEMOGRAFSKA STRUKTURA OTOKA RABA

SAŽETAK

U ovom radu iznesena su osnovna geomorfološka, ekonomska, etnopovijesna i demografska obilježja otoka Raba te etnopovijesni podaci koji su utjecali na uobličavanje njegove populacijske strukture, ukazujući na najvažnija populacijska kretanja na otoku koja su utjecala na njegovu populacijsku strukturu. Rad, kao dio holističkih antropoloških istraživanja morfoloških, fizioloških, genetskih i sociokulturnih obilježja stanovništva otoka Raba, nastoji odrediti unutar-nje i vanjske čimbenike koji su mogli pridonijeti promjenama i/ili stabilnosti populacijske strukture unutar šireg sociokulturnog i povijesnog konteksta.