FORTY YEARS GEOGRAPHIC FIELDWORK IN GREECE

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ABSTRACT

The paper gives an overlook about the autor`s fieldwork starting in 1961 in Cyprus and then carried out in Continental Greece (e.g. Mountain Swell of East Thessalia, Meteora), on the Peloponnesus (e.g. Basin of Sparti, Western Arcadia) and on numerous islands of the Aegean Archipelago. The main results of geomorphical investigations (relief generations, development of peneplains, pediments and glacis, paleokarst) are shown. The main results of cultural geographic fieldwork (e.g. geography of settlement) with aspects of environmental problems (e.g. soil erosion and quasinatural geomorphical units) are also demonstrated.

KEY WORDS: Geomorphologie, Reliefgenerationen, Paläoökologie, Kultur-geographie, Umweltgeographie, Mythogeographie.
Relief generations, climatogeomorphology, environmental geography, cultural geography,mythogeography.

1. INTRODUCTION

The fieldwork I did in Greece, I always interpreted as unity of research dispositions of natural- and social sciences. To segregate geography into natural sciences and human disciplines, like demanded 35 years ago in Germany, I considered unsuitably because the great international projects like the Man And Biosphere-Project, I was leading in Salzburg in the seventies and eighties, showed that they could be handled only by the knowledge of an uniform geography.

Previously in the year 1961 I tried to give an example of the integrated method of landscape-ecology on the northern side of Troodos Mts. (Riedl, 1963), one year after the retreat of the British and long before the establishment of the unfortunate Attila-line. By that investigation I examined the net-like relations between physical and cultural geographic, partial complexities of the landscape. In the seventies and eighties I furnished evidence for the holistic investigations of landscapes on the examples of Taygetos- and Parnon Mts., and mainly on the example of Ossa Mts. in Thessalia and the Aegean Archipelago. Belonging to physical geography I specialized in geomorphology and soil geography. In Greece I also specialized in settlement geography and in 1963 I analyzed the top growth of Athens. Mainly the physiognomic indicators of speculative fallow were worked out; recently this paper (Riedl, 1964) is already of historical-geographic interest.

2. GEOMORPHOLOGICAL INVESTIGATIONS

2.1. THE PENEPLAINS AS OBJECT OF RESEARCH

When I was beginning to work geomorphologically in Greece I had two important theories of alpine geomorphology in mind. The first theory explains the piedmont benchland of the mountain ranges by fault block-dynamics, like Machatschek (1934) did. Thereby a peneplain was lowered by step faults. In such a case we notice a peneplain-system of same age but situated in different altitudes. In the ground plane the fault lines must be accompanied by smooth slopes. In contradiction to this theory Penck (1924) and Spreitzer (1951) showed, that the piedmont benchlands originate by phases of tectonical stability and denudation. In this case there exist peneplains with different ages in different altitudes, whereas the older peneplain must be situated higher than the younger one.

In this respecht I investigated the basin of Sparti, the Ossa Mts. and in the eighties and nineties all the larger islands of Cyclades (Riedl, 1982 a,b) and some East Aegean Islands (Riedl, 1989a, 2001b), also the Northern Sporades

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(Riedl 1998 a,b). In most of the cases it was possible to map a peneplain`s staircase with 5-6 steps whose amount of uplift diminishes from Continental Greece to Peloponnese and the Aegean Archipelago. The following arguments confirm the different ages of the Greek peneplains: essentially is the independence of the peneplain`s staircase from fault lines. The cutting of older fault patterns by younger denudation systems is also important. The isolated subsidence of peneplains by neotectonical conditions can be found e.g. on Seriphos (Riedl, 1986c). The younger and lower denudation systems interlock with older and upper peneplains in the kind of triangular embayments and flat passes like at Ossa Mts, Arcadia (Riedl, 1978), on the North Aegean Islands (Weingartner, 1994), Northern Sporades (Riedl, 1998a) and Cyclades (Riedl 1991a, 1984a). The flat passes don`t originate by incision of two valley heads, but by active widening of the peneplains, breaking through into higher situated relief elements. The peneplains interlock with those also in the kind of intramontainous basins e.g. on Naxos, where there exists a geomorphological, relationship between the Tragea-peneplain and the basin of Kinidaros. Upper peneplains are deeply incised by valleys with convex-concave profile and wide bottoms (Riedl, 2001b). The peneplains are also divided into less incised valleys with flat bottoms and an inclination of their slopes of merely 1 to 3°.

It`s essentially that the Greek peneplains don`t represent geometric plains. Mainly in plutonitic areas the peneplains are determined by cupolas, tors and inselbergs of varied geomorphology. Such reliefs of the peneplains show differences in altitude of 100 m like in Tinos, Seriphos, Mykonos and Naxos (Riedl, 1995, 1982a,b, 1991b). These features one may observe also in the gneiss-like granites of Ikaria. So we are able to recognize distinct geomorphological elements, constituting the Greek peneplains. All the elements confirm the importance of sheetflood erosion for the peneplain`s genesis by absence of linear erosion. Sheetflood erosion (Büdel, 1957) attained mikroquanta-like denudation of the chemical weathering mantle at he peneplains with their woolsack-weathering. Paleopedological investigations of the deeply weathered masses yielded high contents of kaolinite and hematite (Riedl, 1979a, 1998b). Sheetflood erosion can be seen at the Mytilini-layers near Kokkarion on Samos and on the example of the Upper Miocene sandstones in Sitia-region of East Crete (Dermitzakis and Drinia, 1998).

All things considered, the gemorphological assemblage of Greek peneplains (Riedl, 1984a,b) is derived from a relict complex, destroyed recently by linear erosin. The relict elements of the Greek piedmont benchland show at the time of their genesis a tropical-summerhumid paleoclimate. By such Neogene climatomorphological conditions not only deep chemical weathering set in but also simultaneous sheetflood erosion.

This paleoclimate was also clarified by the paleoecological investigations of Myftari et al. (1998), Velitzelos and Zouros (1998), Bernor (1979), Thunell (1979), Marasti (1979), Frydas (1998), Kamberis et al. (1992) and Prillo et al. (2001). Therefore the mediterranean Greek peneplains have a great similarity to peneplains, recently developing in North Cameroon, Tanzania or SE-India. It`s also important that the relict peneplains appear nowadays only as weathering basis relief in consequence of the Pleistocene exhumation processes.

The dating of the peneplains mainly in the Aegean Archipelago hasn`t been difficult, because there are clear relations between denudation systems and the well known age of plutonites and the age of the tectonic transport of the Aegean Nappe. The peneplains cut both units in a discordant way. In the case of Tragea-peneplain on Naxos island the peneplain of 230 m height cuts in the same way the Middle Miocene granodiorite and the intra-Tortonian Aegean Nappe (Böger 1983). The inselbergs of Cape Stelida on Naxos are buried by the chert bearing formation of Upper Pliocene (Jansen, 1977). This peneplain must be dated therefore into the Upper Miocene-Lower Pliocene (Riedl, 1984b). The Tragea-peneplain shows an apatite fission-track age of 9,34 ± 1,29 M.a. in the distal segments and of 8,63 ± 0,96 M.a. in the proximal parts (Hejl, Riedl et al., 2001). There exists a far reaching End Miocene coincidence, delineated already 1982 with traditional dating methods.

The uppermost Naxos-peneplain in the altitude of 730 m is older than the Tragea-system. This confirms the apatite fission-track age of 10,9 ± 1 M.a.

within the meaninng of the piedmont-theory. In Paros the maximal age of the uppermost denudation system amounts to 9,9 ± 1,1, M.a. Therefore the uppermost system of Paros being 1 M.a. younger in comparison to Naxos, may be explained thereby, that the peripheral parts of an epirogenetic arched roof must appear later on the erosional surface than the central mountainous region in Naxos.

The topmost peneplain-system of Ios is situated at 700 m mean altitude. With 13,8 ± 1,08 M.a. apatite fission-track age (Hejl, Riedl et al. 2001) this peneplain can`t be older than Middle Serravallian, whereby there exists a high degree of similarity to the age of the upmost peneplains of Samos, Chios and Lesvos (Riedl, 2001a). Preserved paleorelief features on the islands of Tinos and Mykonos (Hejl, Riedl et. al. 2000) have a maximum age in the order of 8 M.a. and similar features at the island of Seriphos have a maximum age of only 6 M.a.

On the other hand shows the apatite fission-track method on the example of Skopelos (Hejl, Riedl et. al., 1999) that the same ages of 10 M.a. of two peneplain-torsos, recently dissected by v-shaped valleys, confirm the ancient unity of a primarly tropic flat valley system of 6 km width. Such ancient valley systems could only develop on a far reaching Neogene continent and never at the recent small island of only 95,7 km².

2.2. PALEOKARST AND RELIEFGENERATIONS

Already in 1973 I investigated the region of Amvlema-pass between the bays of Amfissa-Itea and the basin of Gravi in Boetia, where I found the geomorphological assemblage of an ***Upper Cretaceous-Older Tertiary*** cone-Karst (Riedl, 1973). Besides the cones other typical elements include grikes, displaying vertikal walls, and developed on Cenomanian limestones. The 15 to 20 m deep crevices are filled with bauxite and flanked by numerous, convexly sloping pinnacles whose tops are structured by karren. A labyrinth-like network of chimneys filled with bauxite may be considered yet another characteristic. This relief generation indicates a climate at the time of its formation that was controlled by high constant rainfall and high temperatures (Riedl, 1994c). The Upper Cretaceous paleokarst in Greece corresponds to the pre-Gosauan karst of the Lower Austrian Thermenalpen.

As younger ***Eocene paleokarst generation*** we may observe in the area of the Vitina-water gap (between Vitina and the basin of Kamenitsa) sinkholes with depths of 30 m, that are characterized by very irregular contours and steep sides with inclinations of 40-50°. Between such cockpit-like dolines and pipes, isolated tower karst hills are rising several decameters high. Towers and cones in limestones of the Gavrovo-Tripolitza zone are covered by thin, less than 50 m thick layers of flysch sealing also the dolines. The present-day watergap has been exhuming this Eocene assemblage of landforms.

We may recognize in the area of the Meso-Hellenic trough karst depressions of **Lowermost Miocene** age that are developed in the metamorphic limestones of the Subpelagonian basement (Riedl, 1974). This type of paleokarst in the landscape of Elatos and Dragazia (Thessalia) dates from the turn from Aquitanian to Burdigalian transgression. "Höckerkarren" (hump shaped karren) and plump small ridges, disappearing in the Burdigalian marls, are typical features of the Early Miocene karst.

The ***Middle Miocene paleokarst*** I investigated on the island of Samos. The flat marble-surface of the topping Karvouni-level (1075m) is dissected by grikes that are incised several decameters deep. The karst corridors are several meters wide and end in cockpit dolines with wide bottoms that are irregularly surrounded by rock walls. Simultaneously to the deep, intense corrosion hematitic paleosoils are developed. The correlate deposits to this paleokarst generation are base gravels of the basin of Mytilini determined as Upper Serravallian.

Marginal karst plains with mogotes, pediments and smooth slopes (Stocker, 1976) represent a geomorphological complex on Mani-peninsula. The Upper Pliocene transgression discordantly cuts the complex paleorelief which implies that the pediments and the large marginal karst plain as well as the upper smooth slopes must be older than the Upper Pliocene transgression. The conglomerate mantles and the layers of petrified soil sediments may serve as evidence that this specific **Uppermost *Miocene-Lower Pliocene*** paleokarst generation developed under

a seasonally humid, tropical climate and not under an arid one. From the genetic point of view creeping and sheetflood erosion on thick soil covers may be considered as essential processes affecting the karst pediments and soils and controlling the lateral corrosion at the marginal karst plain.

Similar to the Mani peninsula karst pediments without glacis that open out into the marginal karst plain also dominate the piedmont benchland of Arcadia (Riedl, 1978). Even on the Cyclades, notable on Syros the paleokarst of Late Miocene age includes residuals of marginal karst plains. The same circumstances we find in the Middle Thessalian swell (Riedl, 1979a,b). According to the very thorough mapping by Katsikis (1992), who was student in Salzburg more than 20 years ago, the polje of Joannina (Epiros) must be interpreted as a poligenetic polje. The character of this most complex extensive landform is still considerably shaped by the paleorelief of Late Miocene and Lower Pliocene age. The recent large karst basin reveals incrustations by sediements of an Upper Pliocene lake. With the karst basin of Kopaida Papadopoulou-Vrinioti (1990) was intensively occupied.

At last I already found in 1974 the youngest paleokarst generation of ***Plio/Pleistocene*** age. This paleokarst generation reveals a close dependency on the ancient surfaces of the intramontanous Neogene basins. In this respect the basin of Sparti may be considered a most illustrative example. The pediments of Parnon Mts. change in 520-400 m altitude to glacis that cut the Upper Pliocene sediments at an acute angle. The whole area of the Parnon Mts. is structured by shallow through shaped valleys ending on the Plio/Pleistocene glacis. Those "kehltäler" were modified by uvalas and small poljes. Similar relations between Plio/Pleistocene glacis and poljes I found in Skopelos, Samos and Pholegandros.

2.3. STRUCTURALLY MARKED GEOMORPHOLOGICAL ELEMENTS

Where marble strata of the Attic-Cycladic Complex are developed, we find very often the formation of hogbacks; similar conditions are represented in the Pelagonian Zone. Hogbacks determine the islands of Northern Sporades, of Siphnos (Riedl, 1983c), Naxos and Syros (Riedl, 1982a), Pholegandros and Sikinos (Riedl, 2001b). At all these islands the slopes against the dipping of the bedding planes, covered by Würmian breccias, are steeper than the slopes in the dipping of bedding planes. The last slope type is determined by subcutane karren and sliding tectonics. Between them the subsequent zones are situated and overprinted by poljes. A striking feature is the interlocking of Plio/Pleistocene pediments with those subsequent zones in the kind of flat passes, whereby the hogbacks are disintegrated into hogback-cupolas developing further into karst-cupolas.

2.4. GEOMORPHOLOGIC MICROELEMENTS

Microelements at plutonites of the Attic-Cycladic complex attracted my full attention. The grand woolsack-weathering on Tinos, Seriphos and Naxos (Riedl, 1991b) I found developed in the depth of the chemical weathering mantle of the peneplains. But the exhumed woolsack boulder on the surface of the peneplains show exfoliation and the development of limonitic incrustations. There is no doubt that the superficial woolsack boulders are the result of climatomorphological weathering and succeeding exhumation processes. Exfoliation by itself may exercise a substantial influence on the development of the weathering basal surface of the peneplains in the area of plutonites. It is evident that convex sheeting on shield-inselbergs occuring along pressure release joints could have started only after the Quaternary stripping of the covering blankets.

I have been very interested in tafoni-phenomena (Riedl, 1991c). So I did measurements of radiation, air temperature, soil and rock temperature and relative humidity in semicaves and tafoni. 20 years ago I encouraged my former assistant Weingartner (1982) to take similar measurements in tafoni on Naxos, which he carried on at Thasos (Resch et al. 1989). All these investigations bear out that the Greek tafoni didn`t originate in the sense of Wilhelmy (1981) by evaporation-dynamics from inside to outside under development of nuclear decomposition and superficial incrustations. In contradiction to Wilhelmy`s theory we noticed the setting up of an individual, selfstrengthening

microclimate in primarly only thimble-like alveolated initial structures. By such circumstances hydration and hydrolisis are effective against the fresh nuclear segments of rocks by dynamics from outside to inside. Therefore tafoni-dynamics are similar to pseudokarst phenomena. On Seriphos basal tafoni always develop at the capillary edge of ancient Neogene weathering masses and paleosoils. Lateral tafonisation in plutonites and gneisses leads very often to the phenomena of natural bridges and through-caves. The steep relief of tors gets retreated by tafonisation, so that there remain as heritage of them rock terraces occupied by pseudokarren. On the island of Tinos a manual-like area of pseudokarren is developed in the plutonites of Anomera near Xerovouno. The karren appear as subcutanous round karren. Such a micromorphological assemblage of microelements like in the Anomera of Tinos (exfoliation, woolsack-formations, tafoni-phenomena, pseudokarst) represents excellent geosites in the sense of Theodosiou-Drandaki and Papadopoulou (2001). The large pseudokarst-basin of Mega Limni on Lesvos also represents a famous potential geosite on peridotites.

2.5. QUASINATURAL ASSEMBLAGE OF GEOMORPHOLOGICAL ELEMENTS

By example of Tinos (Riedl, 1994b) investigations were carried out about relief-features and processes of soil erosion as well as their variation due to lithological differences. So far, morphodynamic processes caused by man found little consideration in Greece, although the disastrous consequences of bush-and forest fires, of the decay of field terraces and of grazing tracks are generally known. So I tried to give a systematic treatment of quasi-natural processes and geomorphological units which show a high degree of applied geographical relevance. Such applied aspects are shown recently by Hrissanthou (2001) and Psilovikos on the example of Nestos River and by Vavliakis and Sotiriadis (1993) on the example of recent Quanates-systems. The complexity of quasinatural morphodynamics proved my former assistant Stocker (1995) on the example of Mykonos and Echtinger (1998) on hand of case studies in Thasos.

Belonging to that research-aspect investigations on the island of Siphnos made evident that the secondary phrygana, appearing in the course of decaying field terraces doesn`t represent any effective protection against soil erosion. This protection is only guaranted by completely undamaged terrace walls. Our investigations show, that the lightest extensification of mediterranean field terraces brings about the inevitable collapse of the landscape-ecology that has been kept by man at artificial equilibrium. An essential object of research represented the mapping of resettling vegetation on fallow-terraces according to the age of fallow. With such aspects the isalands of Siphnos, Seriphos, Tinos and Mykonos (Heiselmayer et al. 1995) were treated.

2.6 FLUVIAL EROSION, DENUDATION, ACCUMULATION

The initial, linear fluvial erosion may be described by the fact, that, apart from the rill-head, channels and accompanying slopes generally share the same inclination. Rills induce the recent destruction of the paleorelief. They may be regarded as guidelines to most effective recent erosion in the zone of mediterranean heavy rainfalls. The longitudinal profile of the rills often is divided into waterfall-steps which develop in solid granodiorite (Seriphos), migmatite (Naxos) and gneissoid granite (Mykonos, Ikaria). The initial depressions or trough-shaped valleys represent dominant features of Younger Pleistocene initial linear erosion. In general their declivity ranges between 15 to 35°. Those wide-spanned slope concavities (Riedl, 1990) often appear as niches of cultivated land and are filled a few meters thick with colluvial red soils mixed with debris.

Key features of dominant, linear fluvial erosion are the v-shaped valleys. In the lower courses these valleys turn into flat-floored v-shaped valleys continuing into the coastal plains. The latter type of valleys existed even before the Younger Pleistocene. In the Cyclades and east Aegean islands the alluvial debris of Younger Pleistocene continues below the present bottom of the torrents. On the other hand the present beds of torrents are undoubtedly younger than 1 m high accumulation terraces dissected by the valley-bottom. In most cases the somewhat higher accumulations than the recent bottoms are the result

of enforced erosion and denudation in the period 5000-3500 BP., when the Aegean climate changed to a winterly humid mediterranean type.

The valleys show often "smooth slopes" (Glatthänge) associated with concave and straight profiles and wall-like scarps. The smoothness rather depends on the development of in situ debris. This slope-debris, partly consolidated, merges ino alluvial cones. Layers of red soils with detrital intercalations are typical attributes. The alternation of red beds and debris can be considered as typical feature of Late Würmian accumulations like in Syros. That alluvial debris are defined as correlate deposit of denudation on the smooth slopes. In altitudes below 600 m these circumstances must be interpreted as convergent phenomena to perglacial processes without involved frost heaving structures. In Southern Greece the winterly means of air temperature didn`t overstep 0° C in the cold times of Younger Pleistocene in the hilly zone below 600 m altitude. In Northern Greece Weingartner (1994) showed at the island of Thasos that one must appoint in the Würmian denudation phasis January-means of air temperatures of -6° to -6,7° C corresponding with cryoturbations in the valley of Theologos in an altitude of 500 m. One must explain this by lowering of the Würmian solifluction-zone about 1200 m in comparison to the recent subline of the solifluction zone in the Rhodopes and the East Thessalian Mountain Swell in a height of 1800 m. In Northern Sporades cryoturbate structures (Riedl and Papadopoulou, 1998a) extend however as far down as the sea level. In this case we have to consider that petrovariance certainly promoted this phenomenon and temporary frost activities in Pleistocene near the sea level are therefore evident in contrast to Southern Greece.

3. CULTURAL GEOGRAPHIC RESEARCH

3.1. INVESTIGATIONS ABOUT PERIPHERAL SPACES OF GREECE

Concerning the geography of settlement, Potyka (1979) treated the migration-processes in Laconia. Potyka wrote also (1981) an excellent monograph about the town of Sparti. I mainly investigated the development of traditional kephalichoria (Riedl, 1983a), connected with kalivia-economy, also the transformed kephalichoria (main mountain villages) with only summerly utilization and the development of ancient kephalichoria with recent saisonal migration between different villages. In Thessalia (Riedl, 1981 a) I dealed with the industrial mountain villages transformed into workers` migration-settlements and with young agricultural- and stock farming villages at the foot of the mountains. A special object of research appears in North Evvia (Fischer, 1981) with its stock farming villages connected with additional forest utilization and recently transformed into workers` settlements. A lot of papers dealed with the dynamics of settlements in the Cyclades. Specially there were treated: Mykonos, Thira (Kern, 1980a,b) and Oia (Riedl, 1980), Ermoupolis, Ano Syros and Naxos (Kern, 1981, 1982) and Siphnos (Kern, 1983, Riedl, 1983b). Kern was also occupied with the young cultural geographical processes in Seriphos, Tinos and Mykonos. I gave 1997 an overlook about the recent geographical processes in the Aegean Archipelago mainly controlled by subsidies of EU and connected with great environmental problems. Regarding to applied geography I tried to typify the processes of tourism in Greece (Riedl, 1994a) and to show their relations to discordant spaces of Greece. It has been my intent to suggest soft tourism for settlements in the supramediterranean zone of Greece in contrast to the maritime depersonalization-activities of tourism. Seriphos was treated regarding to the aspect of historical geography, Samos, Ikaria and Tinos were analyzed concerning the regional geography. In Tinos Springer (1997) made clear in his excellent dissertation the geographical importance of that famous place of pilgrimage.

3.2. PHEMOMENA OF URBANIZATION IN NORTHERN GREECE

For this aspect of research the communities of Epanomi and Nea Kallikrateia (Vielweib, 1988) in the vicinity of Thessaloniki were analyzed. Both case studies represent contrary features. Epanomi represents a kephalichori erected in pre-turkokratia times and determined by patrician houses and by rural tribe-like constitution. At the land of Nea Kallikrateia however the winterly pastures of shepherds were situated at the metochia of an Athos-monastery. Not untill

1934 the process of settlement`s foundation by refugees from Asia Minor was finished. Nowadays Nea Kallikrateia appears extremly urbanized, in contrast to the type of the agrarian town-like village of Epanomi.

3.3. URBAN GEOGRAPHICAL INVESTIGATIONS IN THE ATTIC CENTRAL SPACE

About the metropolis of Athens there exists at first time a comprehensive study (Kern 1986) of the population`s geographical behaviour, of the physiognomy and the pattern of functionality. Having treated Greater Athens and the dimos, Kern aimed to focus the city of Athens. The interior of the Schaubert-triangle was investigated and the recent importance of this interior town, overfilled with diminutive industries and retail trade, was demonstrated. The real city functions could only occupy a peripheral position to those interior structures. About the former suburbs of Ahtens Apfl (1990) made her dissertation. Kefisia and Amarousion were treated as case studies. In Kefisia we got knowledge of extreme transformation of the once famous high class urban district. An essential social geographic process represents the selling of extensive garden grounds. The villas of the 19th century are now extremly surrounded by apartment houses and shopping centers.

3.4. GEOGRAPHY OF MYTHS

Untill now the relation between Greek myths and geography wasn`t explored in a decisive way. On the example of Seriphos and its myth of Gorgon Medusa I tried to represent the role of geography (Riedl, 1986b). In my opinion the geographical question aims at first to the spatial and temporal socioeconomic parameters being due to the picture people making about themselves when they are asking in anthropologic kind. On the other hand the question rises how in certain historical phases people perceive their environment by the influence of myths. What a theory or mental map have men about the real landscape by myths? Therefore an essential aspect of knowledge lies in the representation of the real landscape`s structures and in whose comparison with the subjectivly perceived mythological landscape. At last we may ask in the sense of perception geography in what way the perceived environment leads to distinct collective courses of action. So I tried to prove, that the genesis of central and peripheral spaces in prehistoric and classical times (Riedl, 1986a) essentially is controlled by mythologically influenced environments.

4. CONCLUDING REMARKS

Finally it must be noted that all my three assistants made their habilitation-theses by field work in Greece. Kern dealt with the urban geography of Athens. Stocker worked at Mani peninsula with essential climatomorphological aspects and Weingartner mapped the large Thasos island and worked out the Neogene and Pleistocene heritage of geomorphology.

It is also of interest, that Katsikis (now Professor at the university of Ioannina) studied with excellent success on the Geographical Institute in Salzburg and Papadopoulou-Vrinioti partly studied on the same institute and is now assistant professor at the university of Athens.

It is remarkable that Vice President of this congress Prof. Vavliakis and Prof. Mariolakos (President of the Hellenic Geological Society in Athens) are honorary professors for a long time at the university in Salzburg. With their help and the benevolence of Prof. Psilovikos, President of congress, being also visiting professor in Salzburg and the support of the honorable Professor Sotiriadis I could manage the partnership of the university of Salzburg with those of Athens and Thessaloniki.

A lot of work wouldn`t has been possible without support by my family. So I may thank may five sons and my daughter for their help during the field work in Greece: Bernhard (1979 Evvia, 1980 Syros, 1986 Seriphos, 1988 Samos, 1991 Syros, Mykonos, Tinos, 1995 Skopelos, 1999 Lesvos), Dr. Helmut (1976 Taygetos, Parnassos, Olympos), Peter (1979 Mykonos, Santorini), Mag. Michael (1979 Evvia, 1980 Syros, 1982 East Macedonia, Kopaida, Siphnos, 1987 Samos, Ikaria, 1998 Chios), Hans (1982 Crete, 1987 Samos, Ikaria, 1991 Tinos, 1999 Lesvos) and Maria (1979 Evvia, 1980, 1988, 1994 Syros, 2001 Northern Peloponnese).

I am thanking my wife Lätitia, who tolerated my long lasting absences from Austria. But also I am thankful that she has accompanied me specifically during the last 20 years mainly into the Aegean Archipelago.
At last I may maintaine the memory of Alfred Philippson, the past master of geography in Greece, and of P.S. Psarianos, the great pioneer of Greek geography.

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