CHAPTER I

Introduction

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I.I OVERVIEW AND RESEARCH GOALS P. GULDAGER BILDE & P. ATTEMA

The Džarylgač Survey Project (DSP) is a multidisciplinary project, which aims at investigating the rural landscape at both sides of the Džarylgač Lake in the hinterland of the ancient settlement of Panskoe I. In antiquity as well as today, this region was located in the periphery of regional powers. Because of the much varied ethnic composition of the peoples settled or otherwise frequenting the area, past research has foremost been concerned with the question of the relation between settled and nomadic groups, and in line with much Soviet research, strong focus has been the economic capacity of the landscape.

DSP targeted the same questions, but in contrast to previous research, which is fractioned along chronological lines, the project has a holistic approach to the study of the region. This implies that we study the landscape in a long-term, diachronic perspective, because we believe that settlement patterns and land use prior to the Greeks settling the region as well as in post antique and (early) modern periods may help throwing light on antiquity too. In addition, the project combines the study of the productive and the funerary landscape alongside with that of the settlements themselves. Our study has resulted in a better understanding of the use and function of the Northwestern Crimean landscape as well as pastoralist and agricultural strategies enacted by the peoples using the land from antiquity until the present period. More specifically, we hope that the DSP data add to our understanding of the interaction between Greek settlers and indigenous peoples and more in general, to the dynamics of colonization.

I.2 ENVIRONMENTAL CONTEXT | P. GULDAGER BILDE & P. ATTEMA

The Džarylgač Survey zone comprises five distinct landscape zones that differ according to relief, soils, land use, archaeological visibility and known archaeological features (Fig. 3.4). These consist of (a) the coastal Lowland Ridge, where the majority of the previously known sites is located; (b) the Pediment S of Lake Džarylgač, where a few scatters of pottery were recorded in the past; (c) the Hillsides, and (d) the Plateaus/Uplands, where known archaeological features consist of kurgan burial mounds, cists, wells and deserted villages, and (e) the Vodopojnoe Ravine, where a number of deserted Tatarian villages are located and where several Bronze Age sites have previously been recorded. The region is dominated by the two lakes flanking on each side the small promontory upon which is located the settlement of Panskoe I, to the W Lake Sasyk (or Lake Panskoe), to the E Lake Džarylgač. Neither was a lake in antiquity but the outer end of a *balka* (ravine). Around 4,700 BP a sand barrier was formed cutting off the outflow of the *balkas* from the sea.

I.3 RESEARCH HISTORY P. GULDAGER BILDE & V. STOLBA

The archaeological investigation of the Tarchankut Peninsula prior to the DSP has a long history, which goes back to the first half of the 19th century (Fig. 1.1).⁴ Already in the 1830s, a small-scale excavation in the area of Ak-Mečet (post-WW

⁴ Recent overviews in English: Vnukov 2001; Ščeglov 2002a, 11-25; Lantsov & Uzhentzev 2007.

II Černomorskoe) was conducted by A.I. Šmakov, who has also left a description of the ancient settlement associated in the later scholarship with Kalos Limen (Šmakov 1844). In an attempt to localize the Greek cities mentioned by ancient Greek sources, P.O. Buračkov (1815-1894) conducted regional investigation of the area in the 1870s, having produced a valuable description of the coast from the Bakal' Spit to the bay of Karadža and further E towards the Lake of Donuzlav and Eupatoria (Buračkov 1875). Yet, it is only from the first half of the 20th century with the investigations by L.A. Moiseev and P.N. Schulz that the West Crimean antiquities were addressed systematically and from a truly scientific point of view.

While Moiseev's works in 1916-1917 and in the late 1920s, later on taken over by M.A. Nalivkina, concerned mainly Kerkinitis and Kalos Limen (Ak-Mečet/Černomorskoe Settlement), Schulz, between 1933 and 1934, investigated the W coast of the Crimea from Karadža to the S end of Lake Sasyk-Šivaš (Šul'c 1937, 252-254; 1941, 265-277) and again in 1948, together with G.D. Smirnov, the W coast of the Crimea from the River Alma to Perekop as well as the S coast of Lake Donuzlav. Furthermore, in the beginning of the 1960s he investigated archaeological monuments of the N coast of Lake Donuzlav (Lancov 2004, fig. 2). These works remain by and large unpublished.

A new period in the investigations of the Northwestern Crimea is associated with the works of the Tarchankut Expedition directed in 1959-1986 by A.N. Ščeglov and since 1987 by V.F. Stolba (for a summary, see Ščeglov 1985; 2002a, 11-17, pl. 4).⁵ The expedition was launched from the Chersonesos Museum, Sevastopol', in 1959 with the aim of investigating the Chersonesean chora and verifying Schulz's concept about the simultaneous appearance of the Greek and Scythian fortified settlements. In 1969 it was transferred to the Leningrad Branch of the Institute of Archaeology, Academy of Sciences of USSR (LOIA AN SSSR; now The Institute for the History of Material Culture, Russian Academy of Sciences, St Petersburg [IHMC RAS]). During the first decade of its functioning (1959-1968) the coast line of Western Crimea from the Kača River to the S to the Bakal' Spit to the N, more than 250 km along the coast and up to 10 km inland, was investigated by means of *razvedki*-type of survey, that is of a non-systematic, exploratory kind (Ščeglov 1985, 3). During the same years excavations took place at the multi-period fortified settlement of Tarpanči (1960-1966; Ščeglov 2002a, pl. 4.1.8-10) and the Early Hellenistic farmhouse at Vetrenaja Bay (1963-1966; Ščeglov 2002a, pl. 4.1.22). In addition, aerial photos were investigated as sources for the reconstruction of the ancient agricultural landscape of Western Crimea, first of all its regular divisions into plots (Ščeglov 1989).

From 1969 attention was turned to the settlement of Panskoe I (Ščeglov 2002a, pl. 4.1.25). Between 1969 and 1977 the large building U [*=usadba*, farm house] 6 was excavated (Panskoye I 2002) as well as U13 and U14. From 1979 the largest complex, U7, in the central part of the settlement was the subject of study. Two more building complexes, so-called U2 and U10, have been partially investigated at the E and SE periphery of the site in 1987-1992 and 1994 respectively. Alongside the works at the settlement, in 1969-1986 and 1994 a large part of its necropolis was excavated (Rogov 2011). A small scale investigation carried out in 1993 located the 'settlement' Panskoe V between Panskoe I and II (Randsborg 1994). In 1978 the remains of an isolated Early Hellenistic farmstead at the locality of Panskoe III was completely unearthed (Ščeglov 1987, 240, fig. 2.2; Ščeglov 2002a, pl. 4.1.23).

Between 1981 and 1987, a multi-period fortified farmhouse at Bol'šoj Kastel' was excavated (unpublished; Ščeglov 2002a, pl. 4.1.19) and between 1983-1984, remains located *ex situ* of a rural sanctuary were investigated at the cliffs of Džangul' (unpublished; Ščeglov 1988; Ščeglov 2002a, pl. 4.1.17).

Ščeglov's long-term study of Western Crimea has resulted in a number of written contributions. Most important are the two synthetic monographs *Polis i chora (Archeologičeskie pamjatniki Kryma)* from 1976 (a revised French edition appeared in 1992: *Polis et chora: Cité et territoire dans le Pont-Euxin*) and *Severo-Zapadnyj Krym v antičnuju epochu* from 1978. In addition is to be mentioned the well-documented publication of *Panskoye I. The Monumental Building U6*, which saw the light in 2002. Even though it is concerned with a single building complex, it gives a good overall introduction to the Tarchankut Peninsula in antiquity in English.

The 1960s and the early 1970s are characterized by a number of systematic excavations primarily carried out by the North Crimean Expedition of the Crimean branch of the Institute of Archaeology, Simferopol. This expedition was launched in 1961 as an outcome of the plans for the construction of the Severo-Krymskij Kanal (North Crimean Canal; Ščepinskij & Čerepanova 1969). This canal, completed in 1971, is the main waterway of Northern Crimea supplying Crimea with water from the Dnieper River. The first years (to and including 1964) were concentrated in the Perekop area far N of

⁵ Please note that the site names attributed to the numbers 27-29 are not correct. They should be: 27: Mežvodnoe; 28: Vodopojnoe; 29: Burun Eli or Groty; 30: Vladimirovka/Masliny.

and thus not of interest for the DSP zone. Even though the main aim of the expedition was the investigation of kurgans in the inland area, since 1966 the *razvedki*-type of surveys were also focusing on the coastal area of the Razdol'noe and Černomorskoe districts including the area of the DSP, where a string of Hellenistic settlements was detected. The expedition was directed successively by P.N. Schulz (1961, 1964), E.V. Vejmarn (1962-1963), A.A. Ščepinskij (1965-1976), V.N. Korpusova (1977-1978), V.A. Kolotuchin (1981-1990) and S.G. Koltuchov (1992-1995).

In 1971 five kurgans near Vodopojnoe were excavated. They are dated to the second half of the 5th-beginning of the 4th century BC (unpublished), and in 1972 further four contemporary kurgans over Snežnoe (Ščepinskij 1973, 355) and four kurgans near Mežvodnoe were investigated. In 1987 a *razvedki*-type of survey along the coast between Bakal' and Mežvodnoe was carried out (unpublished; reference in Lancov 2004, 62; Lantsov & Uzhentzev 2007, 681). On that occasion 10 'settlements' situated at the coast and up to 5 km inland were located. They date to the 4th-3rd century BC, but in most cases material found was slight. Furthermore, in 1991-1992 nine barrows, which might have represented two different burial grounds, were excavated near the village of Dalekoe. Out of 29 attributed burials excavated in these kurgans, 25 date to the Early through Late Bronze Age (Pit Culture [2], Catacomb Culture [13], *Kultura Mnogovalikovoj Keramiki* [5], Timber Grave Culture [4]), the Scythian and the Late Medieval periods being represented out juve three and one graves respectively (Koltuchov, Kislyj & Toščev 1994, 101-102). In the 1990s S.G. Koltuchov carried out investigations in the ravine E of Vodopojnoe with the aim of studying the prehistoric landscape of the region.

In addition to the work carried out by the North Crimean Expedition is to be mentioned the contributions of the Donuzlav Expedition of the Moscow Institute of Archaeology and the Eupatoria Museum headed by O.D. Daševskaja (1964 till present) with investigations of the Zapadno-Donuzlavskoe, Južno-Donuzlavskoe and Beljaus settlements on the S coast of Tarchankut and the excavations of the expedition of the Leningrad branch of the Institute of Archaeology and the Moscow State University under the directorship of A.N. Karasev in Čajka.

As far as the DSP area and the closely adjacent territory is concerned, attention must be drawn to the work of the Institute of Archaeology of the Ukrainian Academy of Sciences at the settlement of Mežvodnoe directed by T.N. Vysotskaja (1967-1968) and the Charkov University detachment of the North Crimean Expedition headed by V.A. Latyševa, which in 1972-1986 carried out excavations at the Hellenistic settlements of Masliny (Vladimirovka), Groty and Skalistoe.

Since the last campaign in 1994 at Panskoe I, archaeological work taking place in the Tarchankut has been primarily concentrated in the Černomorskoe Settlement (since 1988 carried out by the West-Crimean Expedition of the Simferopol Institute of Archaeology directed by V.A. Kutajsov), in Beljaus (Donuzlav Expedition of the Moscow Institute of Archaeology and Eupatoria Museum; director O.D. Daševskaja) and in Kulčuk (directed by A.S. Golencov; first as a detachment of the Moscow Institute of Archaeology expedition then as an independent expedition of the Institute for the History of Material Culture, St Petersburg; currently directed by S. Lancov), and in 2005-2006 excavations have been conducted in the Karadža Settlement. The only excavations taking place in the DSP study zone are the ongoing investigations of the Černomorskoe Settlement.

Three main themes have pervaded the scientific investigation and analysis of the region in previous research schemes: (i) the ethnicity of the inhabitants of the various settlements, (ii) the maximum extension of the Chersonesean chora, and (iii) the production capacity of the settled land.

1.4 DSP'S POSITION IN REGIONAL SURVEY P. GULDAGER BILDE & P. ATTEMA

1.4.1 Black Sea region

As a particular discipline of archaeological fieldwork in eastern as well as western scholarship, regional investigations (in Russian *razvedki*) were of a non-systematic, exploratory nature. Usually work was (and is) done on foot and assumed ancient locations were visited and sampled. This method was frequently combined with gathering information from local informers (shepherds, landowners, villagers with special knowledge of local affairs, such as bar- or restaurant owners), and the local intelligence was then tested in the field. The result was the coverage of large tracts of land, but because 'sites' were mostly visited and sampled based on the knowledge that there either were ancient remains or because the landscape type adduced the researchers to believe that based on analogy there would be ancient remains, this type of survey tended to confirm already existing knowledge.

In the West, over the past 40 years, survey methodology has developed into a highly specialized field method in its own right (Barker and Mattingly (eds.) 1999-2000; David & Thomas 2008; see below, Section 1.4.2). Over the years, in

the Mediterranean landscapes, of especially Greece and Italy, the need was felt to map regional landscapes in ever more detail. This was given by a combination of heritage concerns as the archeological record appeared to be rapidly destroyed through increasing urbanization and mechanical farming and of academic interest in the potential of the surface record as a means *in se* for detailed reconstruction of past settlement and land use histories.

In Soviet archaeology surface investigations have remained above all focused on highly visible features in the landscape (e.g. kurgans, remains of buildings, or land divisions) and the tradition of the *razvedki*-type of survey has continued somewhat longer in the Black Sea region than in the West. There are two main reasons for this. One is that, as an effect of the Iron Curtain, there has been little scholarly exchange concerning the development of the discipline, wherefore eastern and western scholarship has developed in two different directions during most of the 20th century. Another reason is the notorious lack of (detailed) topographical maps, which until recently were kept as military secrets. This has made topographical studies and not least their publication exceedingly difficult (Guldager Bilde & Stolba 2006, 8).

The *razvedki*-type of survey in the Northern Pontic region has produced a number of interpretative historical maps featuring dots marking 'sites'. In the Tarchankut region we may mention Kolotuchin 1996, fig. 1; 2003, fig. 1 concerning the Bronze Age; Ščeglov 2002a, pl. 4 concerning the Hellenistic period (Fig. 1.1); Lancov 2004, fig. 1 on sites in the Chersonesean chora of the 4th-3rd century BC. None of the mentioned maps contain any detailed topographic information. In fact, in many cases it is impossible to determine the more precise location of the individual dot. This is problematic, because many of these 'sites' have never been published further than as the dot on the map. In fact, before the 1990s not a single 'site' found in a survey and not subjected to following excavation has been published with full documentation.

Moreover, dots on maps are commonly taken as persuasive testimonies of history, but they are foremost a mapping of research activity. And if this activity interacts with existing knowledge it tends to confirm established ideas or research stereotypes. Concerning the Tarchankut earlier regional investigations took as point of departure the shore line of the sea and of the lakes. This led to the discovery of ancient artifacts, especially Greek, at a number of localities and this occasioned the historical conclusion that the Greeks settled along the coast and the lakes, whereas inland areas were the arena of nomadic groups, who left their burial mounds as markers of their territory (e.g. Ščeglov 1978, 32 fig. 8; 2002 pl. 4 = Fig. 1.1). As we shall see, the results of the DSP systematic, intensive survey has proven that this historical interpretation needs serious reconsideration.

However, things are changing. Historical and contemporary maps are now publicly available along with aerial and space photos, and the early 1990s saw an intensification of East-West scholarly cooperation. Systematic, intensive field survey is now occasionally practiced in the Black Sea region mainly as part of collaborative projects. To be mentioned is the Ukrainian-Polish investigation of Nymphaion's *chora* made in 1993-1997 (Scholl & Zinko 1999; Zin'ko 2006), O. Doonan's survey around Sinope carried out between 1996 and 1999 (Doonan 2004; 2006), as well as the survey made by a French-Russian team on the Taman' Peninsula in 1997 through 1999 (Müller et al. 1998; 1999; 2000; Bolikhovskaja et al. 2002; Gorlov et al. 2002). In addition to the above-mentioned surveys with a primary focus on the Greek period, the British-Bulgarian survey around the Roman city Nikopolis ad Istrum carried out between 1999 and 2001 (Poulter 2000) as well as the German-Bulgarian investigation of the territory in the hinterland between the Roman forts in Iatrus and Novae which took place from 1997 to 2003 are to be mentioned too (Conrad 2006).

We strongly recommend that modern landscape archaeology become much more widely used in the Pontic region, because it is an invaluable method to recover prehistoric and historic data in a landscape that is currently threatened and rapidly being destroyed by natural and anthropogenic factors such as coastal erosion,⁶ illicit digging as well as by urban, infrastructural and agricultural expansion. Further initiatives on the recording and preservation of the unique archaeological landscape of Northwestern Crimea are therefore badly needed.

1.4.2 The Mediterranean

In Mediterranean landscape archaeology the awareness of a rich but rapidly vanishing archaeological surface record has led to increasingly sophisticated field methods and data analysis ever since Sir Ward Perkins' famous South Etruria surveys

⁶ Alone in the DSP study zone, the sites of the Černomorskoe Settlement, Masliny, Vetrenaja Bay farm, and Skalistoe 5 are partly eroded away.

during the 1950s to the 70s.⁷ Since about 1980, however, the initially still extensive surveys, focusing above all on obtrusive remains in the landscape such as necropoleis and Roman villa remains, have gradually given way to ever more intensive and systematic surveys aimed at recording all past activity in the landscape. Especially over the last decade significant advancements have been made in both field methodology and data analysis, which the DSP has sought to introduce in the archaeology of the Northern Black Sea coast.⁸ Below, we mention some relevant aspects:

As to field methods we note:

(a) The ever increasing intensity of systematic pedestrian artefact survey of ploughed agricultural terrain in contiguous gridded fields.

In the DSP coverage of surveyed units was aimed at 20%. Such highly intensive surveys are especially useful to detect settlement patterning on the local scale and aim at recording the smallest of sites. This type of survey was deemed suitable for the cultivated zones within the DSP survey area consisting of large stretches of evenly ploughed fields (see Chapter 2.3.1).

(b) A growing attention for zones with low ground visibility covered in vegetation and for the survey of which effective field strategies still have to be developed.

In the DSP the Hillsides with their steppe vegetation posed this challenge. In Chapter 2.3.1.2 the methodology of the systematic survey of the Hillsides is described.

(c) The implementation of handheld computers equipped with global positioning devices for fast and spatially accurate recording.

In the DSP the efficiency of working with digital recording in the field for storage in a Geographical Information System was further improved (see Chapter 2.5.1).

(d) The incorporation of remote sensing techniques as an integrated tool in the field survey.

In the DSP the focus was on geomagnetic survey which was applied to known archaeological sites but was also successfully used to detect and map off-site features (e.g. animal pens), as discussed in Chapter 2.3.3.

(e) The incorporation of landscape analysis.

In the DSP this took the form of a landscape classification to be used as a tool to explain variations in settlement patterning and to comment on land use potential, as discussed in Chapter 2.3.4.1.

As to data analysis we note:

(a) The attention for biases in the surface archaeological record caused by, for instance, surface visibility, post-depositional processes, and methods of collecting finds.⁹

In the DSP surface visibility was systematically recorded, while a number of sites were augered to establish whether subsurface strata had been preserved. Surveyors were instructed to, in principle, collect all surface material found on their transects (see Chapter 2.3).

(b) The establishing of criteria for the classification of surface sites as an interpretive tool.¹⁰

In the DSP all sites were classified and related to the overall landscape classification (see Chapter 6.1).

(c) An increasing interest in chrono-typological and functional analysis of survey pottery assemblages of all periods including coarsewares.¹¹

In the DSP these aspects are evident from the discussions in Chapter 5.3.

It is our feeling that with the DSP we have demonstrated the potential of the application to the Crimean landscape of survey methodologies developed in the Mediterranean. At the same time it offers a possibility for comparison between settlement development in landscapes around the Mediterranean and the Black Sea. So far, limited exchange of methodological insights between landscape archaeologists working in the West and the East has implied that sampling techniques

⁷ Then Director of the British School at Rome, Ward Perkins undertook these surveys to record the archaeological landscape around Rome when deep ploughing destroyed the archaeological heritage of the countryside bringing vast quantities of fresh archaeological material to the surface (Barker & Loyd (eds.) 1991, Introduction).

⁸ Over the years, an ample bibliography on survey methodology and data analysis in the Mediterranean has come into existence.

⁹ Issues relating to biases in field survey and analysis are discussed in Van Leusen 2002, chapter 4.

¹⁰ A recent example of site classification of a regional survey in Italy is found in Van Leusen et al. 2005.

¹¹ Winther-Jacobsen 2010a and b.

and the strategies behind them differ to an extent that comparison of data between Mediterranean and Black Sea landscapes is in the present situation virtually impossible.¹² The DSP is unique in the sense that the same field methodology was applied both in South and Central Italy and in Northwestern Crimea, allowing direct comparison of finds distributions and site densities and of trends in the development of settlement organization (Attema, Guldager Bilde & Williamson 2010). Conferences drawing together landscape archaeologists working in the Mediterranean and in the Black Sea area are therefore necessary fora in light of exchange of methodological insights (Guldager Bilde & Stolba 2006).

Finally, it needs to be stressed here that the application of the instrumentation of modern landscape archaeology to the Northwestern Crimean landscape has been exceptionally felicitous because the archaeological record of the Northwestern Crimea is much better preserved compared to many Mediterranean landscapes. Intensive field walking in combination with non-invasive investigations such as applied in the DSP have led to very rapid and exceptional results as shown in this publication. A thorough and rapid documentation of the unique archaeological landscape of Northwestern Crimea and subsequent initiatives for its preservation we highly recommend to anticipate future developments in the field of mechanized agriculture, coastal tourism, and industry. Also this is something to be learned from many Mediterranean landscapes. It is the project's fundamental belief that the best possible results are only gained through international collaboration, a multi- and interdisciplinary approach and in a constructive relationship with local political and administrative authorities.

The data of the DSP are permanently deposited on the web hosted by *Data Archiving and Networked Services* (DANS EASY), The Hague, The Netherlands. Permanent web identifier: http://persistent-identifier.nl/?identifier=urn:nbn:nl:ui:13-0mg-hmc. The access to the data requires a password. Instructions are available on the web page.

¹² Comparison of survey results is at the heart of the current debate in Mediterranean survey archaeology. See for instance the contributions in Alcock and Cherry (eds.) 2004.