

JUDEA AND SAMARIA
RESEARCH STUDIES

JUDEA AND SAMARIA RESEARCH STUDIES

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INTRODUCTION

The 19th Conference on research and development in Judea and Samaria was held in memory of Dr. Ya'akov Eshel, the founder of these conferences. To our very great sorrow, Prof. Hanan Eshel, his son, tragically passed away recently at the age of 52 after a serious illness. Prof. Hanan Eshel was among the founders of the settlement of Ofra, and graduated from the Institute of Archeology and the Department of Jewish History at the Hebrew University in Jerusalem. He was a senior staff member at the Institute of Archeology and for a time the chairman of the Department of Land of Israel Studies and Archaeology at Bar Ilan University. He also headed the Jeselsohn Epigraphic Center of Jewish History. His outstanding scholarship dealt with the Qumran Scrolls, the Hasmonean State, documents of the Bar- Kochba Revolt, numismatics of that period, and many other topics.

In spite of his many achievements, he was very modest and often made do with being known as the beloved son of his parents. He was of great support to his late father, helping him in the organization and establishment of the Judea and Samaria conferences. He often chaired the sessions on archeology there and was one of the most exciting lecturers at these conferences. He participated in the editing the proceedings, and published many papers on his own new research there, and encouraged colleagues as well as students to publish papers in these volumes and did so for almost twenty years.

In the introduction to Vol. 18 he wrote: "Since my father had organized the 18th conference and worked on its editing and publishing, I took on myself to finish the job. However, if we would have been fortunate that he would have edited it, he would have done it much better". Although Hanan finished the job, he insisted that only his father's name appear as the editor.

We regard it a great privilege to continue Ya'akov and Hanan Eshel's work. May their memory be a blessing.

Vol. 19 of Judea and Samaria Studies is published after the Minister of Defense Ehud Barak officially approved changing the college's name to the Ariel University Center of Samaria. This is certainly a moment of historical significance, and a milestone in the realization of the dream its founders, who dreamed of becoming a legitimate leading Israeli University.

Many papers were submitted. All were subjected to academic review and, ultimately, only half of those submitted were accepted.

In view of the freeze on building in Judea and Samaria, we thought it necessary to develop an indication tool of opinions in the Israeli population with regard to settlements in Judea and Samaria. Results of this survey, as well as their significance are presented in the beginning of this volume. We hope to publish this indicator again every year, thus showing its changes with time.

The three sections in this volume represent various disciplines: Section One contains studies in Bible, Archaeology and History. Section Two contains studies in the Social Sciences, and Section Three contains studies on Earth Science and Agronomy. Together they represent the various strata of the region's characteristics and ongoing activities in the past and present.

I wish to thank all those who assisted me in this job: Members of the editorial board of this volume, Prof. Joshua Schwartz of Bar-Ilan University who helped in the editing of the English abstracts, and the many scholars who refereed the papers, whose remarks contributed to the academic level of the volume.

I also want to thank Eti Rind, our devoted secretary, Meira Hess, language editor, Shoshi Heisler, who prepared the volume for press, Zahava Valdman, who dealt with graphics, and the Old City Printers.

Miriam Billig Ph.D Director of Samaria & Jordan Rift R&D Center

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SUMMARIES

PART ONE: HISTORY AND ARCHAEOLOGY

WAS THE ARK PRESENT AT THE BATTLE OF MICHMASH?

Yigal Levin

Ariel University Center of Samaria & Bar-Ilan University

In the midst of the battle against the Philistines at Michmash, Saul discovers that his son Jonathan is missing. According to 1 Sam. 14:18, he commands Ahijah the Priest, “Bring the Ark of God”, and the text goes on to explain that the Ark was with the Israelites on that day. He then abruptly orders him “withdraw your hands”. This episode is problematic for several reasons: in verse 3, Ahijah was said to be carrying an “ephod”, not an ark; nowhere else in the Bible is the Ark said to have been used as an oracle – this is the function of the ephod and the Urim and Thummim; and finally, according to the previous chapters, the Ark had been captured by the Philistines, returned to Kirijath-Jearim, and remained there until retrieved much later by David. Nowhere else is it said to have been in Saul’s possession.

Different explanations have been offered. The Septuagint has “ephod” instead of “Ark”, and many have accepted this. The Jerusalem Talmud cites an opinion that there were actually two Arks. Some modern scholars have preferred the MT, and their solutions range from the harmonistic to the literary-critical. We suggest understanding the text against the background of the Iron Age I in Israel, in which multiple cultic centers may have used different implements for different functions – the Ark of Shiloh may not have been the same as the Ark used by Saul, and may have had different functions as well. The later Deuteronomistic editors attempted to unify the various accounts, and this process was continued by the Septuagint, the Jerusalem Talmud and generations of later commentators.

THE BATTLE OF SAUL AGAINST THE PHILISTINES AT MICHMAS (1 SAMUEL 13-14) AS AN ASPECT OF "MILITARY DEMOCRACY"

Amnon Shapira

Ariel University Center of Samaria

In 1943 the Assyriologist Jacobsen established that the term democracy might be used in relation to the ancient Near East ("Primitive Democracy in Ancient Mesopotamia"). Afterwards a number of studies were published utilizing this idea regarding Biblical Israel. This idea has been supported by numerous Biblical scholars and Assyriologists beginning with Albright, and including Kramer, Speiser and eventually even Weisman, Talmon and Tadmor.

One of the applications of this idea began to develop within the context of "military democracy" (as per the definition of Diakonoff, from the Institute of Assyriology of St. Petersburg and with the support of Shemaryahu Talmon and Haim Tadmor of the Hebrew University). Talmon claimed that "I would define rule in the period of the Judges as 'military democracy', i.e., without the will and support of the people the judge would be nothing... I use the term 'democracy' here with some hesitation, because the rule was not based on a constitution. The Biblical democracy was not based on a constitution but on a balance of power between the people and its leader. This was the case during the period of the Judges and during the Monarchy, the latter being limited by the actual power of the people to depose kings who the people opposed."

In this article I shall attempt to analyze the story of the battle of Saul and his son Jonathan against the Philistines at Michmas (1 Samuel 13-14). As is well known, Jonathan violated the oath of his father, the military commander' who had commanded that the forces fast and not eat during the entire course of the battle. When Jonathan was discovered, he was sentenced to death by Saul, but the "people", the 600 soldiers in the field, objected and faced off the king and succeeded in "redeeming" Jonathan from death. This "people's trial", in which the people override the king has a number of unique attributes which all seem to be in keeping with the framework established by Diakonoff-Talmon: "Military Democracy" in the Bible.

ŠNM RAHUS

Zohar Amar

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Excavations at the city of Samaria carried out in 1910 uncovered ostraca in the storerooms close to the king's palace (8th century BCE), and of these, ten bore an inscription reading: '*nevel šmn rhs*'. Many studies have dealt with the term '*rhs*' and the consensus seems to be that the term refers to a type of oil produced from the olive tree. Our study shows that the term '*šmn rhs*', which appears on the Samaritan ostracon, was preserved in several medieval sources which relate either to the choice olive oil that was produced in *al-Sham* (the Land of Israel and Syria) under its Arabic name '*Zait al-maghsūl*' which means 'washed oil' or to the term '*Zait al-Filastini*' (oil of Palestine). The oil underwent a process of washing in water to remove its characteristic accompanying taste and odor in order to transform it into a basic, neutral oil, probably for the technique of oil production and the vessels referred to in the Arabic sources and which have been found at several archeological sites in the Land of Israel which are dated to the Iron Age. We suggest that the oil in question is a distinct variety of oil, one of the exclusive quality products which were stored in the 'treasure house' of the kings of Israel.

THE ADMISSION OF THE NAME *ALEXANDER* INTO THE JEWISH ONOMASTICON

Nahum Cohen

Achva Academic College for Education

This article deals with the admission of the name *Alexander* into the Jewish onomasticon during the period of the Second Temple. The theoretical background briefly reviews name lists based on papyrological and epigraphic sources. In addition, naming conventions developed in the course of this period in the history of the Jewish people are referred to. Following a short presentation of Alexander the Great, the article turns to discuss the adoption of foreign names by Jews concentrating upon *Alexander*. Having established the fact that this was the most common of all foreign names adopted by the Jews the article goes on to address the issue of the warm relations between Alexander and the Jews on the one hand, as against the enmity he developed towards the Samaritans on the other. Did Alexander meet a delegation of the

Jews while he was marching along the Eretz Israel coast during the years 332-331 BCE? Did he visit Jerusalem? Why did the Jews hold him in high esteem? Was it because he treated them well, or merely on account of the severe punishments to which he subjected the Samaritans?

HAR HAMELECH IS STILL A RIDDLE

Ze'ev Safrai

Department of Land of Israel Studies and Archaeology

Bar-Ilan University

Har Hamelekh is a settlement and area mentioned often in Rabbinic sources. The history of the settlement is known, but its identity is in dispute. Until the Bar-Kokhba Revolt, Har Hamelekh was a Jewish area of settlement; if it suffered damage in the Great Revolt there is no reflection of that in the evidence we have. Apparently, therefore, Har Hamelekh was located mainly north of the 'circle of destruction' of the year 70 CE.

Har Hamelekh did suffer serious damage in the Bar-Kokhba Revolt. Research has offered various suggestions for identifying the region. Klein once suggested that the area is eastern Mt. Benjamin, we have preferred the western part of the region, which is closer to the various settlements that were mentioned in the sources. Yuval Shahar suggested that the sources refer to a more northerly region i.e., western Samaria, following Zertal's suggestion about Nabata. We should like to return to the original identification - eastern Benjamin - and to demonstrate that there is no evidence of massive Jewish settlement in western Samaria. In that connection the article will discuss the value of place names preserved only in the Babylonian Talmud.

HURVAT GANNIM - A JEWISH SITE IN THE NORTHERN SHEPHELA

Ofer Sion & Yehudah Rapuano

Antiquities Authority, Jerusalem

Hurvat Ganim is situated in the northern part of the Judean foothills, a kilometer west of Tel Beit Shemesh. In the excavations carried out by the author in the area designated for the development of the settlement, it was found that the beginning of occupation at Hurvat Ganim in the First Temple period (Iron Age II) began near Nebi Haydar. The Jewish settlement at Hurvat Ganim in the Second Temple period was not unusual in terms of population, as more

than 20 Jewish villages were surveyed in and around the northern foothills of Judea within a radius of 10 km of Hurvat Gannim

The first stages of occupation during the Second Temple period began in Hasmonean times, in the second half of the Second Century BCE and included an area of 15 dunam. Most of its inhabitants engaged in agriculture. The site was occupied until 70 CE when the Jerusalem Temple was destroyed. The Bar-Kokhba Revolt apparently resulted in a long-term interruption of settlement until the Byzantine period which evinced some renewed activity, although only the wine press found on the site could be associated with this period. The ceramic material found in the winepress points to occupation during the Mamluk period. At that time, the wine press was reused, possibly as an oil press. During this last period, the population of the site thinned out considerably. This conclusion was also supported by the data drawn from surveys conducted in the Judean foothills.

KHIRBET KULÂSÔN – A SITE FROM THE SECOND TEMPLE PERIOD AND THE BAR-KOKHBA REVOLT IN THE TOPARCHY OF ACRAVA

Eitan Klein & Boaz Zissu

Department of Land of Israel Studies and Archaeology
Bar-Ilan University

Khirbet Kulâsôn is an ancient site located in the southern desert fringe of Samaria, approximately 2 kilometers east of the Shiloh Valley and one kilometer northwest of the modern village El-Mughaiyir.

In early 2009, the authors conducted an archeological survey at the site on behalf of the Martin (Szusz) Department of Land of Israel Studies and Archaeology at Bar-Ilan University, after great damage was caused to the site by development works, agricultural work, and systematic illegal excavations.

This article will present the results of the archaeological survey, concentrating on remains attesting to a Jewish settlement at the site in the latter part of the Second Temple period until the days of the Bar-Kokhba Revolt. Such remains include ritual baths and stone vessels which were used by the Jewish population in accordance with strict observance of purity laws, underground hiding complexes used at the time of the Bar-Kokhba Revolt and a rich repertoire of pottery from that period.

The site joins other sites in southeastern Samaria in which archaeological remains were found, indicating Jewish settlement from the latter part of the

Second Temple period. These sites belonged to the Jewish settlement which existed in the Toparchy of Acraba – the northern region, which was annexed to Judea during the Hasmonaean period and was inhabited by Jews until the Bar-Kokhba Revolt. Findings from the exploration of Khirbet Kulâsôn are presented in the wider historical, geographical and archaeological framework.

ARCHAEOLOGICAL EXCAVATIONS AT KHIRBET JAMJUM (GUSH ETZION): A FORTIFIED SETTLEMENT AND REMAINS OF POTTERY PRODUCTION FROM THE ROMAN AND BYZANTINE PERIODS – 2008 SEASON

Eran Meir¹ & Boaz Zissu²

1. Kefar 'Etzion Field School

2. Bar-Ilan University Martin (Szusz) Department of Land of Israel and Archaeology Studies

Khirbet Jamjum is an ancient site, situated on a prominent hill, on the western slopes of the Judean Hills, west of Gush Etzion, about one km. north of the modern settlement of Bat 'Ain. An archaeological excavation and survey project was initiated and organized by the Kefar 'Etzion Field School. The article presents the results of the 2008 season, directed by the authors, on behalf of the Martin (Szusz) Department of Land of Israel Studies and Archaeology.

The article focuses on a description of the remains uncovered in two excavation areas:

1. Two rooms belonging to a building from the Mameluke period, exposed on the hill-top.
2. Parts of a pottery workshop, including a kiln and wasters, exposed on the topographic saddle, south of the hill-top. Pottery was produced here, most probably during the late Roman and early Byzantine periods

The article describes the main features of the ancient buildings on the hill-top, some rock-cut water cisterns, two Jewish ritual immersion baths (*miqwa'ot*) and other subterranean installations that were explored.

It appears that the ancient site was inhabited from the Hasmonaean to the Mameluke periods; Jews lived here from the Hasmonaean period to the Bar-Kokhba revolt (from the 2nd century BCE-until 135 CE).

THE NORTHERN BORDER OF PALESTINA TERTIA

Moti Haiman

Israel Antiquities Authority & Bar-Ilan University

Throughout the past two decades it was found that a large number of agricultural farms dating mainly to the 6-8th Centuries CE., and of the type particularly found in the desert, were also found in the Northern Negev, located in the sedentary land.

The settlement in the Northern Negev includes ten large ruins, including such sites as Malhata, Kasif, Hur and Karkor. About 70 of the ruins measure from 50 dunam to 4000 dunam (Kh. Maon!!), indicating a population of hundreds of thousands.

In a study carried out by this author during the past 3 years under the auspices of Bar-Ilan University, with the collaboration of the Israel Antiquities Authority, many of the large ruins were mapped by a GPS. The goal was to create a GIS layer for further analysis of the relationships of those ruins with the agricultural landscape. The settlement is characterized by a large number of churches and monasteries, many of them built outside of the large sites. Recent findings of *Matzevot* – ritual cult stones that prevail in the desert, in several sites in the Northern Negev ruins, indicate a dominant presence of Arab population.

This evidence, together with the study of the spatial analysis of the autochthonous settlement of the south Hebron Hills area leads to the conclusion that the Northern Negev, up to 30 km north of Beer Sheva, and part of South Hebron Hills, were part of the Byzantine province *Palestina Tertia* whose capital was Petra.

A HEBREW INSCRIPTION DATED TO 5509/1749 FOUND IN JOSEPH'S TOMB, SHECHEM

Ze'ev H. Erlich (Jabo)

Ofra

A stone that formed part of a Hebrew inscription was set in the floor of Joseph's Tomb in Shechem. The inscription was originally set in the southern wall of the tomb, facing the entrance. Over the course of time the inscription became eroded, and in recent years has been maliciously defaced through the use of both sharp and blunt tools.

The border of the inscription, in the corner of the stone, indicates that this is the upper right hand corner of the original inscription, or in other words the beginning of the inscription. From the few words and letters that have survived we have succeeded in reconstructing the original inscription. Credit for this lies with two travelers who visited the place and made reference to the inscription. The travelers were John Wilson (1844) and the *Abir* (Reb Avraham bar Rabbi Israel) Rozanis (1867).

The translation of the inscription is as follows:

B'S'T B'T'N'V E'M'I O'S'V 'Ben Porat Joseph'

Go and observe this reconstructed magnificent building.

**Blessed is the Lord who inspired Eliyahu Ben Meir H'T'I to build
in the year "House of Joseph" in the month of Sivan in the year
5508. Written by Meir Ben Joseph Mizrahi ST**

The date appearing in the inscription is the summer of 1749.

Since the Jewish community in Shechem at that time was impoverished, we have guessed that the money for the renovation of the building was donated by a rich Jew from Jerusalem. In fact the name of the donor that appears in the inscription, Reb Eliyahu Ben Rabbi Meir, who was known as *Rabbenu*," was that of one of the leaders of the Jewish community in Jerusalem during that period. He also made a donation to the Jewish community in Shechem for the renovation of the building of Joseph's Tomb.

Moreover, in the Hebrew Union College Skirball Museum in Los Angeles there is a cover for a *Sefer Torah* that was donated to the Jewish community in Shechem in 1756 by a rich Jew from Jerusalem. Furthermore, a pair of decorative *Rimonim for a Sefer Torah* that belonged at one time to the Jewish community in Shechem, and which is currently on display in the Israel Museum in Jerusalem, was apparently donated by a Jewess from Jerusalem at that time.

It seems worthwhile to try and locate additional parts of the same inscription, and perhaps even additional inscriptions that were once set in the walls of Joseph's Tomb in Shechem.

THE REJECTED STATUE

Yehuda Ziv

Jerusalem

The Carmelite Monastery of el-Muhraqa is the traditional place of the dispute between the Ba'al prophets and Elijah (Reg.I, xviii). His statue – carved of a yellowish grainy calcareous travertin, uncommon to Israel – was posted beside it in 1919. Although its right hand, holding a sword, had been cut off – it was evidently turned down, as well as his head, in a position of remorse and sorrow about the Lord's reprimand (id., xix:11-12).

In 1956 the old Elijah's statue was changed by a new one – his right hand waving a sword above his head, while his foot is treading down on one of the Ba'al prophets' body... The old statue was lost for a long time – until it was found in the yard of the Nazarene stone-craftsman, who carved the new statue. Only lately it became clear, that the houses of medieval Munich, as well as the bridge above the river between it and the modern city, were built from the same calcareous travertin – brought from the neighbouring quarries of Ingolstadt - like the old statue.

It was surprising & interesting to find, in the neighborhood of the infamous Munich "Bierkeller" (the birthplace of the Hitlerite Racial Theory), a German Carmelite sculptor who carved in local stone the image of "our" Elijah's - a presentation of the Jewish outlook, according to the Biblical narrative!

THE STONE AND LIMESTONE INDUSTRY IN THE MODIIN REGION

Avi Sasson

Land of Israel Studies, Ashkelon Academic College

The stone and limestone industry in the Modiin region is known already from ancient times, both as an answer to the needs of the settlements in the region and as an industry providing its wares to the large settlements along the Coastal Plain. Towards the end of the Ottoman Period, and primarily during the British Mandate period, this industry assumed a new organizational and economic form. It was one of the most important manufacturing industries on the landscape, especially in the area of Nahal Aneva, between the villages of Anabe and Brafilia. In this area, in a stretch of about four kilometers, about sixty quarrying installations and limestone furnaces were found, most of them from the British Mandate period.

The survey enables us to divide these limestone furnaces into three types characteristic of the Ottoman and Mandate periods. Directly connected to them, and in close proximity were found stone quarries. An inscription found engraved on the facade of one of the limestone furnaces dates the phenomenon to the 1920s. During this period the rural and urban Jewish and Arab settlement on the Coastal Plain increased in size; the raw materials they needed were supplied from this region, among others.

The unique character of the region and of this evidence obligate the city fathers of Modiin and government institutions to ensure that the findings be preserved for future generations.

PART TWO: SOCIAL SCIENCES

INVOLVEMENT IN LOCATION OF RESIDENCE IN SAMARIA VS. WITHIN THE GREEN LINE: ECONOMIC ASPECTS

Hanna Gendel-Guterman, Israel Nebenzahl & Miriam Billig

Ariel University Center of Samaria

Two aspects of "place branding" were analyzed: one concerns factors affecting place branding, and the other the assessment of regional allegiance and the financial value of place branding. The study was conducted among similar populations living in urban and communal settlements, mostly religious with a strong allegiance to Land of Israel ideology, half of them residing in Samaria and half of them within the Green Line. The sample consisted of 577 households that had responded to a telephone questionnaire.

Findings show that the degree of emotional involvement and ideological identification with the place and region in which they live were stronger among residents of Samaria than among residents within the Green Line. On the other hand, social involvement and regional allegiance were slightly lower among residents of settlements in Samaria than within the Green Line. The study has also shown that on the average, financial compensation demanded by residents of Samaria for transfer within their settlement or region did not differ significantly from that demanded by those living within the Green Line. However, compensation demanded by residents of Samaria for transfer to within the Green Line differed significantly from that demanded by residents within the Green Line for transfer to Samaria. As a rule, residents of Samaria were more modest in their financial demands than residents within the Green Line. The study has confirmed the importance of branding, and has shown that a higher financial value was being ascribed to the Samaria brand.

THE REAL ESTATE COST OF TERROR: THE IMPACT OF THE SECOND PALESTINIAN INTIFADA ON PROPERTY VALUES IN GILO, JERUSALEM

Yuval Arbel¹ & Yossef Tobol²

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2. Ariel University Center of Samaria

In this short paper we provide unique empirical evidence on part of the cost terrorism produces. We measure this cost in terms of the estimated fall in residential real estate prices at Gilo, Jerusalem both across time (before and after the second Palestinian Intifada) and location (apartments in "frontline" ("non-frontline") streets, which are (not) directly in the line of fire). The case of Gilo, Jerusalem is unique and enables us to isolate the effect of terror. On one hand, since October, 2000 and until April, 2003 (the period of the second Palestinian intifada) this neighborhood, and particularly the front-line streets, has suffered from heavy and casual shooting from the neighboring Palestinian village Beit Gallaha. On the other hand, and fortunately, there were no dead civilians, there were only a few injuries and property damages were limited and quickly repaired during this period. Consequently, the decrease in property values reflects only the cost of terror. Our findings suggest that compared to the pre-Intifada period, relocation of apartments with identical characteristics from frontline (non-frontline) to non-frontline (frontline) streets increase the gap in price fall (uprising) by 11.64% (4.25%). The equivalent sums of money with respect to the average property value in the sample of 600,000 NIS are approx.: 70,000 NIS and only 25,500 NIS. The results possibly suggest insufficient awareness of residents in non-frontline streets to the full extent of the danger.

POST-ORTHODOXY AS A NEW CATEGORY IN ISRAEL JEWRY: THE RELIGIOUS-ZIONISTS CASE STUDY

Nissim Leon

Bar-Ilan University

This paper deals with the post-orthodoxy phenomenon in Israeli Jewry. In the last decade we can observe on a salient pattern in conservative and modern orthodoxy communities in Israel. This pattern depends on the post-modern desire of individuals that are seeking for new social and religious opportunities in orthodoxy life but without breaking the social borderlines. The result is

that more and more individuals put themselves in the gaps, more and more believers become in liminal positions and invent new traditions and new patterns that beyond the regular. This development is salient in the religious-zionist communities such as Feminist movement evolution.

PARENTING STYLES AND ATTITUDES TO VIOLENCE AGAINST CHILDREN AMONG RELIGIOUS AND SECULAR MOTHERS AND DAUGHTERS RESIDING IN JUDEA AND SAMARIA

Sarah Ben David & Mally Shechory

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This study examines the intergenerational transference of parenting styles and the association between parenting styles and attitudes to violence. The study included 198 subjects in two generations of Judea and Samaria residents - 99 mothers and daughters, divided equally into religious and secular groups. Study findings indicate intergenerational differences and secular-religious differences. Intergenerational differences were found in authoritative parenting styles: daughters adopted a more authoritative parenting style than their mothers, regardless of religiosity level. Regarding permissive parenting style, religious daughters adopted a more permissive parenting style than their mothers, while no significant difference was found among secular mothers and daughters. No differences were found in authoritarian parenting styles. Findings on attitudes to the use of violence show that daughters support violence as an educational tool less, regardless of religiosity level, while religious women support violence in education less than their secular counterparts. Study findings substantiate the existence of intergenerational parenting style transference, although such transference is group and style-dependent. No intergenerational transference was found in support for violence in education. Overall it can be said that changes in general educational perceptions have also influenced religious families, albeit at a different pace than secular families.

AN EMPIRICAL CONTRAST BETWEEN OCCUPATIONAL PSYCHOLOGY AND POSITIVE PSYCHOLOGY IN EXPLAINING WORK SATISFACTION, CAREER COMMITMENT, WORK SUCCESS AND PERSONAL WELL-BEING

Hadassah Litman-Ovadia & Nitza Davidovitch

The Ariel University Center of Samaria and Samaria & Jordan Rift Regional R&D Center

This article presents empirical results of a comparison between predictions based on vocational psychology and positive psychology. These two disciplines focus on positive work and life outcomes: While vocational psychology attempts to predict these on the basis of person-work fit and the similarity between individuals and their jobs, positive psychology attempts to predict these outcomes on the basis of everyday use of character strengths.

The occupational adjustment and personal well-being of graduates of the Ariel University Center in Samaria served as the measures used to examine these predictions. Predictors were everyday use of strengths in their current jobs, and the extent of fit between the field of the higher education studies and their current jobs. The researchers concluded that use of personal strengths constitutes a superior predictor for several positive outcome measures, including work satisfaction, work success, and general, personal well-being. Studies-job fit constitutes a superior predictor for a single outcome measure: career commitment. Furthermore, it was found that studies-job fit moderates the relationship between the use of strengths and personal well-being such that the greater the fit, the stronger the association between use of strengths and personal well-being.

In view of the findings, the researchers recommend to integrate both fields of theory and research to obtain a more comprehensive explanation and more accurate predictions of positive life and work outcomes.

ACTION BASED GROWTH AMONG GUSH KATIF EVACUEES

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The study aims to assess action-focused growth among evacuated Israelis subjects following Israel's disengagement from the Gaza Strip in the summer of 2005.

A research questionnaire, measuring probable posttraumatic stress disorder (PTSD), impact of settlement goals, coping strategies, hardiness and demographics was administered several months after the evacuation (T1) to 326 subjects, evacuees from the Gaza strip. Three years after the evacuation (T2) respondents were contacted again and answered a questionnaire measuring PTG (Posttraumatic Growth), life domain's satisfaction and being active in social/political actions during (and after) the disengagement.

Moderate levels of PTG ($M = 59.76$; $S.D. = 20.57$) were found among the evacuees. Regression analyses indicated that impact of economic settlement goal, family support and feeling close to God predicted PTG. In addition, higher levels of PTG were found among subjects who were active during the evacuation and also after the evacuation. PTG was related to higher Personal life domain satisfaction.

The findings support recent findings (Hobfoll et al., 2007) about the role of action in PTG and have important practical implications concerning treatment of trauma's survivors.

PART THREE: EARTH SCIENCES

HYDROLOGICAL MODELS FOR PERCHED SPRINGS IN THE MOUNTAINS OF JUDEA AND SAMARIA

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Perched springs in nature emerge from aquifers lying on aquitards within the unsaturated zone, some of which are one above the other. A finite element model was introduced, using the FEFLOW code for simulating the groundwater flow regime in each of these aquifers, for quantifying the fraction of rain that recharges the aquifers, and for estimating the hydro-geological parameters of the aquifers and aquitards.

Many of the perched springs in Israel are found in the Judea Group aquifer, a stratified carbonate rock unit, characterized by a well-developed karst system. The Battir and Jamia springs exemplifies such a system, where Battir is the upper spring and Jamia is the lower one. The springs discharge at different horizons: Battir at the contact between the Aminadav and Moza Formations, and Jamia at the contact between the Kesalon and Sorek Formations. The 25-year-long measured spring's hydrographs were used to calibrate the spring's coefficients, the hydraulic conductivities of the different layers, the karst features and the yearly amount of rain recharging the spring.

GEOLOGY OF CAVES IN THE NORTHERN SECTION OF THE DEAD SEA FAULT ESCARPMENT

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Karstic caves up to 90 m long were encountered along the northern section of the Dead Sea fault escarpment and the adjacent canyons. Phreatic morphology was documented in dozens of caves mainly within hard Turonian carbonate bedrock of the Judea Group. According to their geometry more than 80%

of these caves can be described as "chamber caves" which developed under phreatic conditions, while the rest are "maze caves" which developed within confined aquifers. In both cases, the caves were formed within ancient aquifers of the Judean Desert. Cave passages mainly follow intersections between tectonic weakness planes and bedding planes. Three main cave clusters are noticed: along *Darga* and *Arugot* canyons and along a section of the fault escarpment between *Na'chal Hazazon* and *Na'chal Kedem* canyons. This may be due to drainage of karstic aquifers through channels confined by structural elements. The formation of the Dead Sea depression since the Late Miocene – Early Pliocene lead to lowering of the base level and dewatering of the caves. The caves were subsequently truncated by erosion creating openings through which water bodies of the depression would later penetrate. The caves are nowadays up to 650 m above the water table, dry and hosting no significant karst processes. The original phreatic morphology was occasionally altered by late mechanical breakdown of bedrock along weakness planes. Dozens of small erosive caves within the Darga Conglomerate (Plio-Pleistocene) were created by weathering and mechanical breakdown of the rock.

THE RISING OF THE PLEIADES AND THE DETERMINATION OF THE EXACT DATE OF THE DELUGE BY R. YEHOSHUA AND R. ELIEZER

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In the Babylonian Talmud Rabbi Yehushua and Rabbi Eliezer relate the 17th day of the second month of the year, the day when the deluge had started, with the stars of Kima, the accepted Hebrew name for the Pleiades.

The Hebrew date is given for the year of the deluge, the year 1656 after Adam according to the Masoretic text of the Bible.

When the Pleiades rise or set simultaneously with the rising sun, they were observed to be connected with the rain season. Consequently, the first date of the year in which they were seen right before sunrise had been used as a major tool in ancient forecasts.

We demonstrate how Rabbi Yehoshua and Rabbi Eliezer meant in their Talmudic statements to accurately determine the day of the Hebrew month to fit the Biblical years of the deluge in both the Masoretic (1656) and the Septuagint (2242) texts of the Bible

Our results have important implications in proving our approach that in the different versions of the biblical texts the chronology was based on

astronomical derivations. Such an implication is emphasized by us in the opening chapter by showing that the date of the destruction of the first Temple had been chosen to accurately fit an astronomical event that is opposite in nature to the astronomical picture characterizing the creation of the world and the building of the Temples.

'OUT OF SEASON' PRIMOCANE RASPBERRY FRUIT MATURATION BY PLANTING TIMING MANIPULATION

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Raspberry plants have perennial root system and biennial canes. There are raspberries which bear fruits on the biennial canes (floricane) and those which bear on the annual canes (primocane). The raspberry fruit production in Europe is mostly limited to June-September. The floricanes produce fruits during the summer, while the primocane produce later, during the early autumn. It is assumed that the low light irradiation in the raspberry growing area of Europe is limiting the fruit production throughout the late autumn and winter, and that the light conditions at the high mountain of Judea and Samaria could support out-of-season raspberry production for export marketing at economic attractive timing. At the present paper we describe the effect of the planting time (July, August and September) of two primocane cultivars ('Polka' and 'Autumn Bliss') on the vegetative growth, fruit yield, fruit quality and picking time. The plantlets of 'Polka' were propagated and produced through tissue culture, while the 'Autumn Bliss' were derived from root shoots. The plants were grown under protected green house. The results showed that August was the favorable planting time. The yields of export fruit quality were 15 and 13 t/ha during December, for 'Polka' and 'Autumn Bliss', respectively.

ALTERNATIVES AND DIFFICULTIES: SUMMARIZING SHMITA YEAR 5768

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Shmita, the Torah law mandating that the land rest every seventh year, has been controversial for the past 120 years of renewed agricultural settlement in Israel. Each Shmita year raises new problems.

Shmita can be observed using several alternatives in agricultural production, marketing and consumption. We used 2249 responses to an internet survey to examine public opinion.

There were various degrees of dissatisfaction with 'Heter Mechira' [the Halachic permission to ease Shmita restrictions by selling the land]. However, the vast majority agreed on the importance of supporting Jewish farmers, and were against reliance on non-Jews for fresh agricultural produce.

There were opposing trends within the religious community. While there was an effort to revise 'Heter Mechira' towards

broad public observance of Shmita, 'Charedi' leaders attempted to prohibit marketing of 'Heter Mechira' produce.

The survey also revealed some general sociological trends. The increasing influence of the Charedi faction may affect the next Shmita [5775], and present new challenges to Israeli agriculture.

TRANSMISSION LOSSES IN URBAN STORM RUNOFF IN A KARSTIC MOUNTAIN ENVIRONMENT - THE CITY OF ARIEL

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Transmission losses represent the infiltration water into the subsurface in flowing water in river channels. In karstic areas most of the running water infiltrates and may reach 100% of the initial runoff; therefore water running in the upper channels of the basin infiltrates and does not reach the downstream channels. The amount of the transmission losses depends on the physiography of the basin and the climatic characteristics of the rain storms.

Studies on transmission losses in Israel were carried in Negev rivers, but very few in the mountainous area of Israel, where most of the water infiltrates.

However we have to explain that the flowing into the aquifer is not a loss to the water resources of Israel, but a vital source of water for the aquifer.

The aims of the study are: 1. To assess runoff during urban floods in the city of Ariel. 2. To define infiltration rates in the natural open channels of the sub-basins and water recharge to the regional aquifer.

Four hydrometric measurement stations were installed in the outlets of four sub-basins, with area sizes ranging from 45 dunam to 2000 dunam. In the 2007/2008 rainfall season transmission losses were 50% of the total runoff volume and up to 70% of the flood peak discharges.

A growing base of scientific research over the last decades has provided new insights on the magnitude of urban runoff storms and their influence on the whole water cycle, affecting channel morphology, groundwater enrichment and the river biota environment. The most innovative aspect of this study is the runoff behavior and water transmission losses between the different sub-basins.