

## ENGLISH ABSTRACTS

### *VAYEHI BIYESHURUN HAMELEKH*

Trends and Changes in the Two Population Censuses of *Sefer Bamidbar*

*Isaac Hershkowitz*

In this paper I wish to compare the two population censuses of *Sefer Bamidbar*. Although their sums seem alike, significant differences between the censuses are revealed. These demographic changes are a reflection of the spiritual state of *Bnei Yisrael*, according to their tribal lines. The criterions that are relevant to these censuses are the tribes' adherence toward the Lord and *Moshe Rabeinu* commandments, the spiritual connection to *Eretz Yisrael*, and the will to concede the birthrights, etc.

Other aspects I deal with are the inner power structures in the nation, composed of the descendants of Leah and Rachel, Bilha and Zilpa.

In conclusion, my goal is to illuminate the dry statistical data of *Sefer Bamidbar*, and to expose the Godly message on the leadership structure of the nation, which is expressed in the abundance that is given to those that abide the divine rules.

### HUMANITY'S RESPONSIBILITY FOR PRESERVING THE ENVIRONMENT AND OUR PLANET

*Zvi Weinberger*

Our planet's climate and environment is severely affected by industrial chemical processes, civilization's reliance upon fossil fuels for power generation and transportation, and the large scale exploitation of natural forests. The ramifications of these processes are the heavy precipitation and floods in some of the world's regions, whereas others suffer from extensive drought, general global warming, a continuing sea-level rise, the increasing intensity of tropical storms and the

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extinction of numerous plant and animal species. Urban air pollution is responsible for increasing mortality and hospitalizations due to cardiac and respiratory illnesses. Air pollution accounts for 700 deaths annually in the greater Tel Aviv area alone.

The Bible prohibits the wanton destruction of fruit trees in times of war (Deuteronomy 20-19). Our sages have deduced from this the general prohibition of wasteful destruction of any object of value. Clearly the most valuable of our possessions is our planet itself – Earth.

The teachings of *Halakha* obligate the individual and society to preserve the Earth's environment.

### THE LETTER “VAV” AND OTHER CHARACTERS OF THE HEBREW ALPHABET AS THE BEGINNING LETTER OF SCRIPTURAL VERSES: A RANDOM LINGUISTIC OCCURRENCE OR A MEANINGFUL PATTERN?

*Joseph Klein*

The letter “*vav*” appears as the opening letter in 71.2% of Biblical verses. Examination of the Pentateuch reveals a consistent decline in the occurrence of the beginning *vav*, from 84.1% in the Book of Genesis to 46.5% in Deuteronomy. A linguistic explanation for the phenomenon is discussed, involving the relationship between the introductory *vav* and the textual syntax. Another hypothesis is based on the symbolic meaning of the letters of the Hebrew alphabet in the Scriptures. It is suggested that the combined contribution of both concepts provides a more complete explanation than either of the approaches considered individually.

### AUTOMATIC CLASSIFICATION OF RESPONSA

*Yaakov HaCohen-Kerner, Dror Mughaz, Hananya Beck, Elchai Yehudai*

Document classification presents challenges due to the many different features, their dependencies and the large number of training documents. In this research we set out to determine whether the use of words is appropriate for classification of documents according to the ethnic group of their authors and/or to the historical period in which they were written. The application domain were responsa written

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in Hebrew-Aramaic. Various experiments produced very successful classification results. Moreover, this research can yield results of great use to scholars in the humanities, such as identifying the differences in writing-style, culture and customs among writers who belong to different ethnic origin and / or historical periods

CURDLING OF MILK AS A CRITERION FOR DETERMINING  
*KASHRUT* OF ANIMALS IN THE BIBLE

*Zohar Amar, Uzi Merin and David Iluz*

Torah law permits as edible food only those mammals that display signs of ritual purity: animals that have a split hoof and chew their cud (Lev. 11:3). However, the Talmud (T. Bavli, *Avoda Zara* 35b) as well as the treatise by Asaph Harofe both cite the curdling of milk as an additional sign of the distinction between ritually pure and impure animals. According to this criterion, it is only the milk of pure animals that curdles while the milk of impure animals does not. This test was accepted by the Rambam as *halakha*, and various laws in the Shulhan Aruch and other *poskim* are based on it.

In order to examine this criterion, the milk of various mammals was tested by two techniques. The first was carried out immediately after milking using the enzyme rennin as accepted in the traditional method. The second was carried out in a laboratory using an Optigraph, an instrument that measures clotting time and the degree of firmness.

The results of the analyses showed the formation of curdling in the milk of the cow (*Bos taurus*), sheep (*Ovis aries*), goat (*Capra aegagrus hircus*), buffalo (*Bubalus bubalis*) fallow deer (*Dama d. dama*), red deer (*Cervus elaphus*), ibex (*Capra ibex*) and the **reticulated giraffe** (*Giraffa camelopardalis reticulata*) – all defined as ritually pure animals. In contrast, no curdling was observed in the milk of the mammals which the Torah defines as ritually impure: in the milk of the horse (*Equus caballus*), donkey (*Equus asinus*), camel (*Camelus dromedaries*), alpaca (*Lama pacos*), pig (*Sus scrofa domestica*), rabbit (*Oryctolagus cuniculus*), monkey (*Macaca*).

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HALAKHIC JUDGMENTS IN GERMANY, FRANCE AND PROVENCE  
REGARDING EDUCATIONAL BEATING OF WOMEN AND  
CHILDREN

*Michal Wolf*

Hebrew law, in general, forbids beating. Educational beating, however, is allowed by many *poskim*. The present composition examines and compares Halakhic judgments in Germany, France and Provence in the 11-13 centuries regarding educational beating of wives and children. It was found that these judgments, unlike the conventional approach in the Hebrew law, completely forbid educational wife beating. These very *poskim* allowed child beating, depending upon two constraints – specific age range and no cruelty. The following combined explanation, Halakhic and sociohistoric, is suggested: while Tanaic and Amoraic writers state that the father is obliged to educate his son, they do not address the husband's obligation to educate his wife. Moreover, the Talmud profoundly allowed children's educational beating. This approach was followed everywhere, including in Germany, France and Provence. However, the latter's approach to issues of wife beating was affected by extra Halakhic factors, especially the woman's socioeconomic status, due to the lack of distinct related Talmudic instructions.