

<sup>21</sup> Velikovsky's opponents, C. Gaposchkin, J. Stewart (*Harper's*, June 1951) insisted that the solar system is electrically and magnetically 'sterile': no electromagnetic fields or forces are present that are able even to a slightest degree to affect the planetary orderly motions. For claiming such fields in the solar system, he was castigated by Mr. Gardner (*In the Name of Science*, p. 33) and placed among believers in a flat earth because he would "belabor the 'orthodox' for refusing to recognize these imaginary energies!" In debate with Stewart, he wrote of "the reluctance to recognize the existence of electrical and magnetic forces in the celestial sphere," and Gardner quotes this to make him appear ridiculous. Velikovsky's claim was based upon several indications and speculations:

1. Jupiter sends radio noises. Confirmed 1955.
2. Earth is surrounded by a magnetosphere, Confirmed 1958.
3. Interplanetary space is permeated by a magnetic field. Confirmed 1960.
4. The Sun has an appreciable charge, which, according to V. A. Bailey, gives it a potential of 10 billion volts (1960; *Nature*, March 21, 1964).
5. The rotation of the earth may be disturbed by an electromagnetic field of force. Confirmed, A. Danjon, 1960. The magnetic force (dipole) follows the law of the inverse cube of distance; at close approaches between celestial bodies a much more intense interaction must result.

<sup>22</sup> The misfortune of science is that no person of the Establishment has condescended to argue with Velikovsky. No general theory provides for everything. But there are four detailed books to argue with.

<sup>23</sup> Who says so? Dogmatic denial.

<sup>24</sup> Historically, in natural and social science, it is often indeed observed, not merely conceivable, that one man is right when most others are wrong.

<sup>25</sup> See above. Also Velikovsky offered a series of crucial tests, such as the great heat of Venus (when it was agreed that Venus' ground temperature was higher by 3° than that of the earth). It was found (1962-3) to be around 800°. Or, the hydrocarbon nature of Venus' envelope. Apparently confirmed: 1962-3 (Mariner II).

<sup>26</sup> "Wrong in detail and still be magnificently right" This is logical nonsense. As above there is ample ground for testing his theories and they have begun to be tested. However, the historical tests are eminently in order. Agreed that, "If these do support his thesis, then the scientific community is indeed gravely at fault . . ." They do so support and the community is at fault.

<sup>27</sup> Margolis says he dislikes impassioned language!

<sup>28</sup> "Anyone" and "a few hours." These are apparently the *Bulletin* qualifications for abuse and slander. An incredible position for a scientific journal. Cf. the similar attempt of Mrs. Gaposchkin (*ABS*, Sept. 1963, p. 17).

<sup>29</sup> R. Juergens checked on Margolis' careful compendium, and reports: "In two brief paragraphs of quotations from *Worlds in Collision*, Margolis deletes five pairs of quotation marks, in effect, attributing words to Velikovsky that are not his; deletes two words, misspells a third, and inserts a questionable synonym for the fourth; he capitalizes four words not so capitalized in the book, and de-capitalizes three others which are capitalized in the book; he ignores Velikovsky's paragraph structure, running parts of two as one; he drops a colon and inserts a period in its stead."

<sup>30</sup> Conveys the idea that Margolis did so; but he gives indication only of having read a version in English by Griffith, not the originals or the later French version.

<sup>31</sup> False. It is fairly certain on its face that the document tells one story and the events are described as parts of the story: tempest, darkness, Pi-Kharoti, battles of King Tum, the apotheosis: in the surges of the whirlpool.

<sup>32</sup> Thom=Tom=Tum. It is difficult to believe otherwise. "Les combats du roi Tom en ce lieu" (Goyon, p. 33), "The conflicts of the king Tum" (Griffith).

<sup>33</sup> King's battles or advance against the 'evil doers' is in text. Velikovsky interprets the two forces opposing Thom as identical.

<sup>34</sup> "Pekharti which Velikovsky alters into Pi-Khiroti." Margolis is unaware that the hieroglyphic text has no vowels, but only consonants; further, he did not read Goyon, because Goyon transcribes *Pi-Kharoti*. "Pi-ha Hiroth which Velikovsky alters into Pi-ha-Khiroth, further enhancing his evidence." Margolis should know that *het* and *khet* are two different letters in Hebrew (as in Handel and Bach, they are pronounced differently); he argues as if the original text of the Old Testament was written in King James Version. Finally, Velikovsky quoted the King James version as is: "encamping by the sea, beside Pi-ha-hiroth" and added in square brackets [Khiroth]. In a letter to Velikovsky of June 6, 1946, W. F. Albright, eminent Orientalist, expressed himself favorably as to the possible identification of Phrt with Pihahrot of Exodus. (Albright was at least then a strong opponent of Velikovsky's chronology). "Ha" is in Hebrew what "the" is in English; Margolis should have known this or, at least, read it in the footnotes of *Worlds in Collision*, or in *Ages in Chaos*.

<sup>35</sup> The notion that the king raped a lady may be appealing to the subconscious of Mr. Margolis, but is not mentioned in either translation of the text. Anyhow the "lady" talked about in the text was the King's mother. (Of course, nothing is impossible.)