_		t state of Science and the opening up of new ideas
		Old GIANTS ignored
		<ul><li>Halton Arp - 300 galaxies named for him ARP</li></ul>
		☐ Intrinsic Red shift
		Next time going to talk about the state of the art plasma science subjects
		Irving Langmuir, Hannes Alfvén, James A. Van Allen
		Remind people about Space Engine
	Enter th	he work of Immanuel Velikovsky
		Student of Freud's student Wilhelm Stekil
		Mathematics, medical degree, Psychiatry and psychoanalysis
		Friend of Einstein
		Came to America to avoid WWII, began to compose his works after studying Egyptian myths and history
		Book "worlds in collision" published after rejected by 8 companies
		Immediately made enemies with Harold Shapely (Harvard astronomer)
	They m	nade him into the modern Galileo (though Arp was literally a Galileo)
	-	de a number of predictions which came true, despite using myth instead of math or astronomy directly
		bly the source of the later furious hatred that led to the Carl Sagan response)
		Venus was incredibly hot, not cold and humid/wet
		Venus' atmosphere was full of hydrocarbons and rotation would be slowing down
		Moon has moonquakes and water
		Mars has water - enter Sitchin and "Lahmu" found in Annunaki tablets!
		Mars' canyons would be signs of electric discharge and poles were carbon/carbohydrate
		Jupiter's massive radio waves and solar magnetic field
		Sun and planets having large electrical charges
		http://www.velikovsky.info/Velikovsky's_predictions -Many contained in Earth in Upheaval
	Carl's F	Response was vindictive, dismissive, full of doubt but very little specific and CHECKED "debunkings"
		Once he made these statements it ruined Velikovsky's reputation all the way, and yet no one ever truly
		addressed the predictions of the Velikovsky Affair
		Velikovsky died 1979 more or less a "broken man", kids took over estate
		Now followed by Dave Talbot and Wal thornhill of the Thunderbolts Project
	Debunl	king Sagan:
		Although Venus coming from the Red Spot seems ridiculous, actually the great red spot is quite a
		mystery. It is clearly not a "storm" but has some form of complex electromagnetic vortext maintaining it. It
		is also clear that Jupiter has some type of underlying geology
		At the time Sagan didn't believe in collisions of the planets, but now the Big whacks are thought to be
		real, just more ancient than Velikovsky said
		The Earth (and Martian) rotation AND tilt do not make sense according to the now falsified Accretion
		Theory (TRAPPIST-1)
		EU Geology is new, however it is increasingly apparent that certain waveforms and crater formations -
		next episode - are ONLY possible via electric discharge and not ware and wind
		Esp. Martian and Lunar craters
	_	Chemistry of atmospheres in all the bodies do not match mainstream theories
	_	Falsification of Oort Cloud ideas "dirty snowball"
	_	Comet Hydrocarbons
	_	Impossibility of Fossil Fuels, and their continual production
	_	Origins of foreign DNA - Sumerian crossover
	_	Many more See book shared
	_	https://www.coasttocoastam.com/show/2016/02/10
		meaning - discussion of Psychology of destruction/catastophe. Aside from conspiratorial forces, are we
_		acting like abused children of the gods/planets?
		vould it be like to live in "Zep Tepi" and then THROUGH the Deluge, Flood, and Cataclysm and finally MArs
		al and the end of the gods/astrology era?? Implications?

# <u>10"</u> A (z = 0.029)B(z = 0.057)(z = 0.243)(z = 0.391)

He arrived at a body of radical inter-disciplinary ideas, which might be summarised as: [citation needed]

- Planet Earth has suffered natural catastrophes on a global scale, both before and during humankind's recorded history.
- There is evidence for these catastrophes in the geological record (here Velikovsky was advocating
   <u>Catastrophist</u> ideas as opposed to the prevailing <u>Uniformitarian</u> notions) and archeological record. The
   extinction of many species had occurred catastrophically, not by gradual Darwinian means.
- The catastrophes that occurred within the memory of humankind are recorded in the myths, legends and written history of all ancient cultures and civilisations. Velikovsky pointed to alleged concordances in the accounts of many cultures, and proposed that they referred to the same real events. For instance, the memory of a flood is recorded in the Hebrew Bible, in the Greek legend of <u>Deucalion</u>, and in the <u>Manu</u> legend of India. Velikovsky put forward the psychoanalytic idea of "Cultural Amnesia" as a mechanism whereby these literal records came to be regarded as mere myths and legends.
- The causes of these natural catastrophes were close encounters between the Earth and other bodies within the <u>solar system</u> — not least what are now the planets Saturn, Jupiter, Venus, and Mars, these bodies having moved upon different orbits within human memory.
- To explain the fact that these changes to the configuration of the solar system violate several well-understood laws of physics, Velikovsky invented a role for electromagnetic forces in counteracting gravity and orbital mechanics.

Some of Velikovsky's specific postulated catastrophes included: [citation needed]

- A tentative suggestion that Earth had once been a satellite of a "proto-<u>Saturn</u>" body, before its current solar orbit.
- That the <u>Deluge</u> (Noah's Flood) had been caused by proto-Saturn's entering a <u>nova</u> state, and ejecting much of its mass into space.
- A suggestion that the planet <u>Mercury</u> was involved in the <u>Tower of Babel</u> catastrophe.
- <u>Jupiter</u> had been the prime mover in the catastrophe that saw the destruction of <u>Sodom and Gomorrah</u>.
- Periodic close contacts with a "<u>cometary Venus</u>" (which had been ejected from Jupiter) had caused the
   <u>Exodus</u> events (c. 1500 BCE) and <u>Joshua</u>'s subsequent "sun standing still" (Joshua 10:12 and 13)
   incident.
- Periodic close contacts with <u>Mars</u> had caused havoc in the 8th and 7th centuries BCE.

# Bargmann and Motz (1962)

In 1962, *Science'* magazine published a letter from Prof. <u>Valentine Bargmann</u> and <u>Lloyd Motz</u> "<u>On the Recent Discoveries Concerning Jupiter and Venus</u>": acknowledging Velikovsky's predictions on radio noises from Jupiter, and the heat of Venus.

# Prof. Harry Hess (1963)

In 1963, Professor <u>H. H. Hess</u>, then Chairman of the Space Board of the National Academy of Science, wrote to Velikovsky:

"We are philosophically miles apart because basically we do not accept each other's form of reasoning — logic. I am of course quite convinced of your sincerity and I also admire the vast fund of information which you have painstakingly acquired over the years.

"I am not about to be converted to your form of reasoning though it certainly has had successes. You have after all predicted that Jupiter would be a source of radio noise, that Venus would have a high surface temperature, that the sun and bodies of the solar system would have large electrical charges and several other such predictions. Some of

these predictions were said to be impossible when you made them. All of them were predicted long before proof that they were correct came to hand. Conversely I do not know of any specific prediction you made that has since been proven to be false. I suspect the merit lies in that you have a good basic background in the natural sciences and you are quite uninhibited by the prejudices and probability taboos which confine the thinking of most of us.

"Whether you are right or wrong I believe you deserve a fair hearing." [3]

## **Discussion**

In 1977, Kronos journal published the following:[4]

### Select Bibliography of Velikovsky's Prognostications

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- 4. The Velikovsky Affair (New Hyde Park, 1966), pp. 233-249.
- 5. Yale Scientific Magazine, "Venus -- A Youthful Planet," (April, 1967), pp. 8-11.
- 6. Pensée I, "A Record of Success," (May, 1972), pp. 11ff.
- 7. Pensée II, "H. H. Hess and My Memoranda," (Fall, 1972), pp. 27-28.
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- 11. The Age of Velikovsky (Glassboro and Fort Worth, 1976).
- 12. Kronos II:3, "The Sun's Magnetic Field," pp. 78-80 (February, 1977).
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- 14. Kronos III:I, "L. Sprague de Camp: Anatomy of a Zetetic," pp. 45-67 (August, 1977).
- 15. Test of Time by Immanuel Velikovsky (unpublished manuscript detailing correct prognostications).

# References

- ↑ Carl Sagan, "An Analysis of Worlds in Collision" in Donald W. Goldsmith (Editor), Scientists Confront Velikovsky (1977), Cornell University Press, ISBN 0801409616, ISBN-13 978-0801409615
- ↑ V. Bargmann, Lloyd Motz, "On the Recent Discoveries Concerning Jupiter and Venus", Science, December 21, 1962, Vol. 138, pp. 1350-52
- 3. ↑ Letter March 15, 1963, "H.H. Hess to Velikovsky" at the Velikovsky Archive
- 4. 

  † Kronos Vol. III No. 2 (Winter 1977) "Velikovsky and Establishment Science"