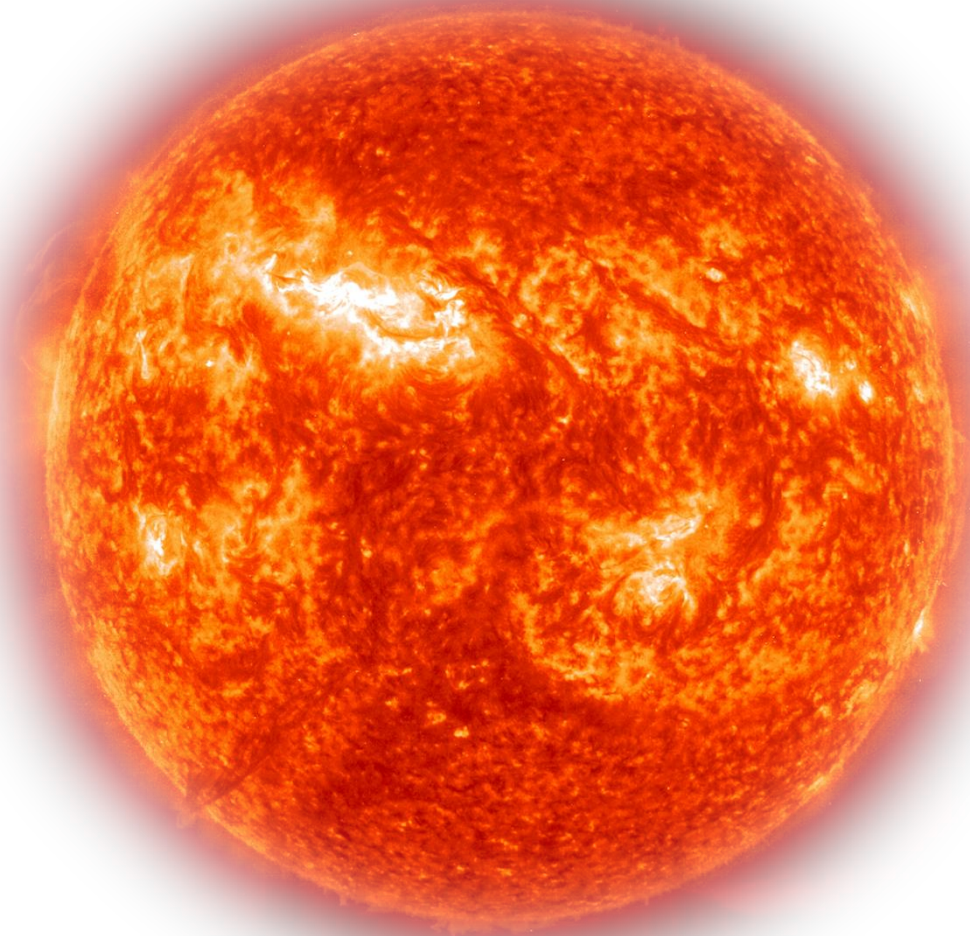


Is the Sun a mere cooling mass?

Beyond the cosmic veil, the heart and head of our Solar System rotates and beats; externally is spread its robe, the nature of which is not matter, whether solid, liquid, or gaseous, but vital electricity, condensed and made visible.



Question by Frederick W.H. Myers

Suggested by A.P. Sinnett's *Esoteric Buddhism*, provided by "an English F.T.S.," Frederick W.H. Myers, July 1883. From *Blavatsky Collected Writings*, V pp. 139-40.

- 1 Is the Nebular Theory, as generally held, denied by the Adepts? It seems hard to conceive of the alternate evolution from the sun's central mass of planets, some of them visible and heavy, others invisible, — and apparently without weight, as they have no influence on the movements of the visible planets.
- 2 And, further, the time necessary for the manvantara even of *one* planetary chain, much more of all seven, — seems largely to exceed the probable time during which the sun can retain heat, if it is merely a cooling mass, which derives no important accession of heat from without. Is some other view as regards the maintenance of the sun's heat held by the Adepts?

Answer by H.P. Blavatsky

From *Blavatsky Collected Writings*, (IS THE SUN A MERE COOLING MASS?) V pp. 155-63.

Such is the accepted theory of modern science: it is not what the "Adepts" teach. The former says — the sun "derives no important accession of heat from without"; the latter answer — "the Sun needs it not." He is quite as self-dependent as he is self-luminous; and for the maintenance of his heat requires no help, no foreign accession of vital energy, for he is the heart of his system, a heart that will not cease its throbbing until its hour of rest shall come. Were the Sun "a cooling mass," our great life-giver would have indeed grown dim with age by this time, and found some trouble to keep his watch-fires burning for the future races to accomplish their cycles, and the planetary chains to achieve their rounds. There would remain no hope for evolving humanity; except perhaps in what passes for science in the astronomical text-books of Missionary Schools, namely, that "the Sun has an orbital journey of a hundred millions of years before him, and the system yet but *seven thousand years* old!"¹

The "Adepts," who are thus forced to demolish before they can reconstruct, deny most emphatically

- (a) that the Sun is in combustion, in any ordinary sense of the word; or
- (b) that he is *incandescent* or even *burning* though he is *glowing*; or
- (c) that his luminosity has already begun to weaken and his power of combustion may be exhausted within a given and conceivable time; or even
- (d) that his chemical and physical constitution contains any of the elements of terrestrial chemistry in any of the states that either chemist or physicist is acquainted with.

¹ Prize Book, *Astronomy for General Readers*

With reference to the latter, they add that, properly speaking, though the body of the Sun, — a body that was never yet reflected by telescope or spectroscope that man invented — cannot be said to be constituted of those terrestrial elements with the state of which the chemist is familiar, yet that these elements are all present in the sun's outward robes, and a host more of elements unknown so far to science. There seems little need, indeed, to have waited so long for the lines belonging to these respective elements to correspond with dark lines of the solar spectrum to *know* that no element present on our earth could ever be possibly found wanting in the sun; although, on the other hand, there are many others in the sun which have either not reached or not as yet been discovered on our globe. Some may be missing in certain stars and heavenly bodies still in the process of formation; or, properly speaking, though present in them, these elements on account of their undeveloped state may not respond as yet to the usual scientific tests. But how can the earth possess that which the Sun has never had? The "Adepts" affirm as a fact that the true *Sun*, — an invisible orb of which the known one is the shell, mask, or clothing — has in him the spirit of every element that exists in the solar system; and his "Chromosphere," as Mr. Lockyer named it, has the same, only in a far more developed condition though still in a state unknown on earth; our planet having to await its further growth and development before any of its elements can be reduced to the condition they are in within that chromosphere. Nor can the substance producing the coloured light in the latter be properly called solid, liquid, or even "gaseous," as now supposed, for it is neither. Thousands of years before Leverrier and Padre Secchi, the old Āryans sung of *Soorya* " . . . hiding behind his *Yogi*¹ robes his head that no one could see"; the ascetic's dress being, as all know, dyed expressly into a red-yellow hue, a colouring matter with pinkish patches on it, rudely representing the vital principle in man's blood, — the symbol of the *vital principle* in the sun, or what is now called chromosphere. The "rose-coloured region"! How little astronomers will ever know of its real nature even though hundreds of eclipses furnish them with the *indisputable evidence* of its presence. The sun is so thickly surrounded by a *shell* of this "red matter," that it is useless for them to speculate with only the help of their physical instruments, upon the nature of that which they can never see or detect with mortal eye behind that brilliant, *radiant* zone of matter. . . .

If the "Adepts" are asked:

What then, in your views, is the nature of our sun and what is there beyond that cosmic veil?

— they answer: *beyond* rotates and beats the *heart and head* of our system; externally is spread its robe, the nature of which is not matter, whether solid, liquid, or gaseous, such as you are acquainted with, but *vital* electricity, condensed and made visible.² And if the statement is objected to on the grounds that were the luminosity

¹ There is an interesting story in the *Purānas* relating to this subject. The Devas, it would appear, asked the great Rishi Vasishtha to bring the Sun into Satya Loka. The Rishi then went and requested the Sun-god to do so. The Sun-god replied that all the worlds would be destroyed if he were to leave his place. The Rishi then offered to place his red-coloured cloth (*Kashaya vastra*) in the place of the Sun's disk and did so. The visible body of the Sun is this robe of Vasishtha, it would seem. — T. SUBBA ROW (*Acting Editor*).

² If the "English F.T.S." would take the trouble of consulting p. 11 of the *Magia Adamica* of Eugenius Philalethes, his learned compatriot, he would find therein the difference between a visible and an invisible planet as clearly hinted at as it was safe to do at a time when the iron claw of orthodoxy had the power, as well as disposition, to tear the flesh from heretic bones. He says:

of the sun due to any other cause than *combustion* and *flame*, no physical law of which Western Science has any knowledge, could account for the existence of such intensely high temperature of the sun *without combustion*; that such a temperature, besides burning with its light and flame every visible thing in our universe, would show its luminosity of a homogeneous and uniform intensity throughout, which it does not; that undulations and disturbances in the photosphere, the growing of the “protuberances,” and a fierce raging of elements in combustion have been observed in the sun, with their tongues of fire and spots exhibiting every appearance of cyclonic motion, and “solar storms,” *etc., etc.*; to this the only answer that can be given is the following: the appearances are all there, yet it is not combustion. Undoubtedly were the “robes,” the dazzling drapery which now envelopes the whole of the sun’s globe withdrawn, or even “the shining atmosphere *which permits us to see the sun*” (as Sir William Herschel thought) removed so as to allow one trifling rent — our whole universe would be reduced to ashes. *Jupiter Fulminator*¹ revealing himself to his beloved would incinerate her instantly. But it can never be. The protecting shell is of a thickness, and at a distance from the universal HEART that can hardly be ever calculated by your mathematicians. And how can they hope to see the sun’s *inner* body once that the existence of that “chromosphere” is ascertained, though its actual density may be still unknown, when one of the greatest, if not *the* greatest of their authorities, Sir W. Herschel, says the following:

The sun also has its *atmosphere*; and if some of the fluids which enter into its composition should be of a shining brilliancy . . . while others are merely transparent, *any temporary cause which may remove the lucid fluid, will permit us to see the body of the sun* through the transparent ones.

The underlined words written nearly 80 years ago embody the wrong hypothesis that the *body of the sun* might be seen under such circumstances, whereas it is only the far away layers of “the lucid fluid” that would be perceived. And what the great astronomer adds invalidates entirely the first portion of his assumption.

If an observer were placed on the moon, he would see the solid body of our earth *only in those places where the transparent fluids of our atmosphere would permit him*. In others, the opaque vapours would reflect the light of the sun, without permitting his view to penetrate to the surface of our globe.

. . . the *Earth* is *invisible* . . . and which is more, the *Eye of Man* never *saw* the *Earth* nor can it be *seen* without *Art*. To make this *Element visible* is the *greatest secret* in *Magic*. . . As for this *Faeculent, gross Body* upon which we *walk*, it is a *Compost*, and no *Earth* but it hath *Earth* in it. . . . In a word all the *Elements* are *visible* but *one*, namely the *Earth*, and when thou hast attained to so much *perfection*, as to know why *God* hath placed the *Earth in abscondito*, thou hast an *Excellent Figure* whereby to know *God* himself, and how he is *visible*, how he is *invisible*.

The italics are the author’s, it being the custom of the Alchemists to emphasize those words which had a double meaning in their code. Here “God himself” *visible* and *invisible*, relates to their *lapis philosophorum* — Nature’s seventh principle.

[Endnote 5 by Boris de Zirkoff: This passage from *Magia Adamica* of Eugenius Philalethes (Thomas Vaughan) appears on the unnumbered eleventh page of the section entitled “To the Reader,” and not on page 11 of the text itself. H.P. Blavatsky emphasizes the fact that the italics are the author’s own. Her proof-reader, however, was not too particular about this. The passage has been checked with the original edition, London 1650, and corrected to correspond to it in every particular. See the *Biographical Index* for a summary of the life and work of Thomas Vaughan.]

¹ [Epithet of the Roman counterpart of Greek Zeus, the Lightning-Hurler]

Thus, if the atmosphere of our earth, which in its relation to the “atmosphere” (?) of the sun is like the tenderest skin of a fruit compared with the thickest husk of a coconut, would prevent the eye of an observer standing on the moon to penetrate everywhere “to the surface of our globe,” how can an astronomer ever hope his sight to penetrate to the *sun’s* surface, from our earth and at a distance of from 85 to 95 million miles,¹ whereas, the moon, we are told, is only about 238,000 miles! The proportionately larger size of the sun does not bring him any nearer within the scope of our physical vision. Truly remarks Sir W. Herschel that “the sun itself has been called a globe of fire, though *perhaps metaphorically!*” It has been *supposed* that the dark spots were solid bodies revolving near the sun’s surface.

They have been *conjectured* to be the smoke of volcanoes or the scum floating upon an ocean of fluid matter. They have also been *taken* for clouds. They were *explained* to be opaque masses, swimming in the *fluid matter* of the sun. . . .²

Alone, of all astronomers, Sir John Herschel, whose *intuition* was still greater than his great learning, came — all anthropomorphic conception set aside — far nearer truth than any of those modern astronomers who, while admiring his gigantic learning, smile at his “imaginative and fanciful theories.” His only mistake, now shared by most astronomers, was that he regarded the “opaque body” occasionally observed through the curtain of his “luminous envelope” as the sun itself. When saying in the course of his speculations upon the Nasmyth willow-leaf theory:

. . . the exceedingly definite shape of these objects; their exact similarity one to another . . . all these characters seem quite repugnant to the notion of their being of a vaporous, a cloudy, or a fluid nature”

— his spiritual intuition served him better than his remarkable knowledge of physical science. When he adds:

Nothing remains but to consider them *as separate and independent* sheets, flakes, scales, having *some sort of solidity*. . . . And these flakes, be they what they may, . . . are evidently the *immediate sources of the solar light and heat*

— he utters a grander physical truth than was ever uttered by any living astronomer. And, when furthermore, we find him postulating

Looked at in this point of view, we cannot refuse to regard them as *organisms* of some peculiar and amazing kind; and though it would be too daring to speak of such organization as partaking of the nature of life, yet *we do know that vital action is competent to develop both heat, light, and electricity,*

— Sir John Herschel gives out a theory approximating an occult truth more than any profane ever did with regard to solar physics.³ These “wonderful objects” are not, as a

¹ Verily — “*absolute accuracy* in the solution of this problem [of distances between the heavenly bodies and the earth] is *simply out of question!*”

² [Endnote 6 by Boris de Zirkoff: These quotations are from an essay by Sir William Herschel (1738-1822), LL.D., F.R.S., entitled *On the Nature and Construction of the Sun and Fixed Stars*, London, 1801, pp. 3 and 5. The italics do not appear in the original, and so must indicate special emphasis laid on these words by H.P. Blavatsky]

³ [Endnote 7 by Boris de Zirkoff: These quotations are from Sir John Herschel’s *Familiar Lectures on Scientific Subjects* (London and New York, Alexander Strahan & Co., 1866, xii, 507 pp.), pp. 83-84. The words: “as separate and independent,” and “some sort of solidity,” as well as the last sentence beginning “yet we do know that . . . , are not italicized in the original.]

modern astronomer interprets Sir J. Herschel's words, "*solar inhabitants*, whose fiery constitution enables them to illuminate, warm and electricise the whole solar system," but simply the reservoirs of solar vital energy, the *vital* electricity that feeds the whole system in which it lives, and breathes, and has its being. It is, as we say, the storehouse of our little cosmos, self-generating its vital fluid, and ever receiving as much as it gives out. Were the astronomers to be asked — what definite and positive fact exists at the root of their solar theory; — what knowledge they have of solar combustion and atmosphere — they might, perchance, feel embarrassed when confronted with all their present theories. For, it is sufficient to make a *résumé* of what the solar physicists *do not know*, to gain conviction that they are as far as ever from a definite knowledge of the constitution and ultimate nature of the heavenly bodies. We may, perhaps, be permitted to enumerate:

Beginning with, as Mr. Proctor wisely calls it, "the wildest assumption possible," that there is, in accordance with the law of analogy, some general resemblance between the materials in, and the processes at work upon the Sun, and those materials with which terrestrial chemistry and physics are familiar, what is that sum of results achieved by spectroscopic and other analyses of the surface and the inner constitution of the sun, which warrants any one in establishing the *axiom* of the Sun's combustion and gradual extinction? They have no means, as they themselves daily confess, of experimenting upon, hence of determining the sun's physical condition; for

(a) they are ignorant of the atmospheric limits;

(b) even though it were proved that *matter*, such as they know of, is continuously falling upon the sun, being ignorant of its real velocity and the nature of the material it falls upon, they are unable "to discuss the effect of motions wholly surpassing in velocity . . . enormously exceeding even the inconceivable velocity of many meteors";

(c) confessedly — they "have no means of learning whence that part of the light comes which gives the continuous spectrum . . . ," hence no means of determining how great a depth of the solar substance is concerned in sending out that light. This light "may come from the surface layers only"; and, "it may be a shell . . ." (truly!); and finally,

(d) they have yet to learn "how far combustion, properly so called, can take place within the Sun's mass, and, whether these processes which we [they] recognize as combustion are the only processes of combustion which can actually take place there."

Therefore, Mr. Proctor for one comes to the happy and prudent idea after all

. . . that what had been supposed the most marked characteristic of incandescent solid and liquid bodies, is thus shown to be a possible characteristic of the light of glowing gas.¹

Thus, the whole basis of their reasoning having been shaken (by Frankland's objection), they, the astronomers, may yet arrive at accepting the occult theory, viz., that

¹ [Endnote 8 by Boris de Zirkoff: These quotations are from *The Sun: Ruler, Fire, Light, and Life of the Planetary System*, by Richard A. Proctor, BA., F.R.A.S., London, Longmans, Green & Co., 1871, pp. 382, 384, 386-87]

they have to look to the 6th state of matter, for divulging to them the true nature of their photospheres, chromospheres, appendages, prominences, projections and horns. Indeed, when one finds the greatest authority of the age in physical science — Prof. Tyndall — saying that

no earthly substance with which we are acquainted — no substance which the fall of meteors has landed on the earth — *would be at all competent to maintain the Sun's combustion;*

and again:

. . . multiplying all our powers by millions of millions, we do not reach the Sun's expenditure. And still, notwithstanding this enormous drain in the lapse of human history, we are unable to detect a diminution of his store . . .

— after reading this, to see the men of science maintaining still their theory of “a hot globe cooling,” one may be excused for feeling surprised at such inconsistency. Verily is that great physicist right in viewing the sun himself as “a speck in infinite extension — a mere drop in the Universal sea”; and saying that,

. . . to nature nothing can be added; from nature nothing can be taken away; the sum of her energy is constant, and the utmost man can do in the pursuit of physical truth, or in the applications of physical knowledge, *is to shift the constituents of the never-varying total. The law of conservation rigidly excludes both creation and annihilation . . . the flux of power is eternally the same.*¹

Mr. Tyndall speaks here as though he were an Occultist. Yet, the *memento mori*² — “the Sun is cooling . . . it is dying! . . .” of the Western Trappists of Science resounds as loud as it ever did.

No, we say; no, while there is one man left on the globe, the sun will not be extinguished. Before the hour of the “Solar Pralaya” strikes on the watch-tower of Eternity, all the other worlds of our system will be gliding in their spectral shells along the silent paths of Infinite Space. Before it strikes, Atlas, the mighty Titan, the son of Asia and the nursling of Aether, will have dropped his heavy manvantaric burden and — died; the Pleiades, the bright seven Sisters, will have upon awakening hiding Sterope to grieve with them — *to die themselves for their father's loss*. And, Hercules, *moving off his left leg*, will have to shift his place in heavens and erect his own funeral pile. Then only, surrounded by the fiery element breaking through the thickening gloom of the *Pralayan* twilight, will Hercules, *expiring amidst a general conflagration*, bring on likewise the death of our Sun: *he will have unveiled by moving off the “CENTRAL SUN”* — the mysterious, the ever-hidden centre of attraction of our Sun and System. Fables? Mere poetical fiction? Yet, when one knows that the most exact sciences, the greatest mathematical and astronomical truths went forth into the world among the *hoi polloi* sent out by the initiated priests, the Hierophants of the *sanctum sanctorum* of the old temples, under the guise of religious fables, it may not be amiss to search for universal truths even under the patches of fiction's harlequinade. This *fable* about the Pleiades, the *seven* Sisters, Atlas, and Hercules exists identical in

¹ [Endnote 9 by Boris de Zirkoff: Tyndall's quotations have not been found for purposes of checking.]

² [remember, you will die.]

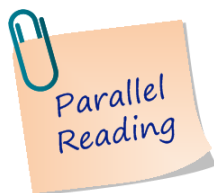
subject, though under other names, in the sacred Hindu books, and has likewise the same occult meaning. But then like the *Ramayana* “borrowed from the Greek *Iliad*” and the *Bhagavad-Gita* and Krishna plagiarized from the Gospel — in the opinion of the great Sanskritist, Prof. Weber, the Āryans may have also borrowed the Pleiades and their Hercules from the same source! When the Brahmans can be shown by the Christian Orientalists to be the direct descendants of the Teutonic Crusaders, then only, perchance, will the cycle of proofs be completed, and the historical truths of the West — vindicated!

Addendum

From *Blavatsky Collected Writings*, (ANSWERS TO QUESTIONS – FRAGMENTS) XIII p. 318.

[The Manuscript of this Fragment in H.P. Blavatsky’s handwriting is in the Adyar Archives. It consists of two sheets written on both sides. Some of the information contained therein runs parallel to what H.P. Blavatsky stated in Answers to “Some Inquiries Suggested by Mr. Sinnett’s *Esoteric Buddhism*” which may be found in Vol. V (1883) of the present Series. — *Boris de Zirkoff*.]

. . . that “no earthly substance with which we are acquainted — no substance which the fall of meteors has landed on the Earth *would be at all competent to maintain the Sun’s combustion,*” only may be excused for asking — whence then this mirific theory of the Sun’s “fires” and slow yet incessant combustion? Thus the “Adepts” answer: When one has learned the true constitution of the Sun, [one] will not stop to think that this manvantara of any duration “seems largely to exceed the probable time during which the sun can retain heat” for — it is *not* “merely a cooling mass.” And thus the “Adepts” have answered Question 2, as far as the ability of men utterly unacquainted with modern Science would permit them; and they now dismiss it with a last remark. Truly modern solar physics is far more worthy of a poem, a fiction full of “conceptions which beggar those of Milton” than of a sober treatise upon the mathematical facts of Astronomy. And there is a true occultist ring, the Key-note of all upon which future speculation ought to be solidly based upon, in these words of the great poet physicist.¹



Students should be fully conversant with the metaphysical concepts and learning aids set out in our Secret Doctrine’s Propositions 1 to 3 Series.

¹ See Proctor, p. 412. [*The Sun Ruler, Fire, Light and Life of the Planetary Systems*, by Richard A. Proctor, London: Longmans & Green, 1871]