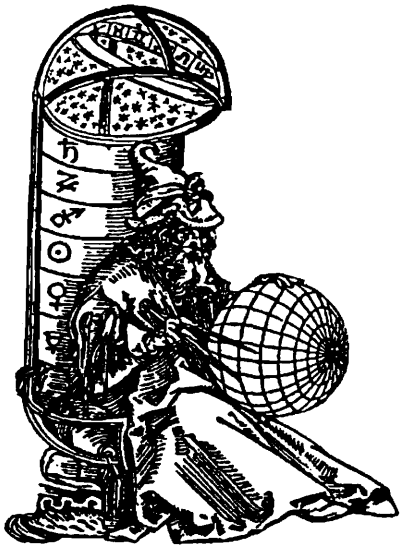

H. A. D. News

The Newsletter of the Historical Astronomy Division of the American Astronomical Society

Number 39 ••• February 1997

Results of H. A. D. Elections

David DeVorkin, Chair. Dr. Devorkin "is curator of astronomy at the National Air and Space Museum of the Smithsonian Institution and is presently completing a biography of Henry Norris Russell. His main HAD activities in his first year as HAD Chair will be to campaign for donations to the LeRoy Doggett Prize and will continue to act as editor for the AAS Centennial History. He has received some interesting group photographs of early AAS meetings (post-1950) and is looking for more informal shots taken by AAS members at Society meetings for the Centennial Book, which now has two dozen invited authors."

Virginia Trimble, Vice-Chair. Dr. Trimble "oscillates at a frequency of 31.79 nHz between the University of California, Irvine and University of Maryland. She is currently gathering courage to deal with her share of the Hipparcos stars under the 1982 announcement of opportunity and to write a chapter for the AAS centenary volume on the history of the High Energy Astrophysics Division. Her interest in history of science derives at least partly from her being old enough that what is history to many of you was current events for her."

Barbara Becker, Committee Member. Dr. Becker "is project director of MindWorks, an NSF-funded history of science-based curriculum development project for introductory secondary school physical science. In addition, she teaches in the history department at the University of California, Irvine."

Kevin Krisciunas, Committee Member. "After 20 years of doing software work for the Kuiper Airborne Observatory and the United Kingdom Infrared Telescope, Kevin Krisciunas is now at the University of Washington hoping to earn his PhD. Historians of astronomy may recognize him as the translator (from Russian) of a book on the history of Pulkovo Observatory (1978), the translator (from German) of *The History of Astronomy from Herschel to Hertzsprung* (1984), and the author of *Astronomical Centers of the World* (1988). He has also dug into the Struve family history and investigated the star catalogue of the 15th century Central Asian astronomer Ulugh Beg. In 1991 he appeared in episode 1 of the PBS series 'The Astronomers'."

In addition, Thomas Hockey begins his term as Secretary- Treasurer. "Dr. Hockey is Associate Professor of Astronomy at the University of Northern Iowa. He is currently at work on a book about the history of observing the planet Jupiter, to be published by the Institute of Physics Press in 1998. His favorite Christmas present was a 1921 copy of George Forbes' *History of Astronomy*."

Summary of Minutes from the HAD Business Meeting

January 13, 1997 (Draft)

The meeting was called to order at 13:00 by David DeVorkin [DD], Vice-Chair, on behalf of Woody Sullivan [WS], Chair (who was unable to attend). Members observed a moment of silence in memory of the late LeRoy Doggett, former Secretary-Treasurer, who passed away in April.

OLD BUSINESS

1) Approval of Minutes. Steven Dick [SD] (substituting for Dr. Doggett) summarized the minutes of the last meeting, held January 1996, in San Antonio, Texas. These minutes appear in *HAD News* issue #36 (2/96).

Frank Edmondson [FE] moved acceptance of the minutes. Katherine Bracher [KB] seconded. The motion passed unanimously.

2) Secretary-Treasurer's Report. SD read the report. (See the article in this *HAD News*, below.) As required by the HAD Bylaws, the annual Audit Committee has been named.

FE moved acceptance of the report. KB seconded. The motion passed unanimously.

3) Committee Reports

DD reported for the **Obituary Committee**. The twenty-two obituaries published this year (twenty pages of the *BAAS*) include those of persons who passed away during 1996 and a "backlog" of persons who passed away in previous years (since the Committee was formed). This "backlog" now has been reduced, from two dozen at the beginning of the year, to six at the end of the year. Emphasis is placed on those persons who might not be remembered in obituaries published elsewhere. Judith Johnson and Lynn Scholz, of the AAS, were acknowledged for their assistance in turning text into published obituaries.

Obituaries average 1,000 words in length, for those with no photograph, and 750 words, for those including a photograph. Some obituaries submitted to the Committee had to be edited in order to meet these criteria. However, the full, unedited obituaries will be kept in the HAD archives.

Discussion was invited. It was suggested that edited obituaries be so noted in the *BAAS*.

DD reported that the **Archeoastronomy Committee** is dormant. He announced that the HAD Committee has decided to offer the Archeoastronomy Committee Chair to David Iadevaia.

SD (for Robert McCutcheon [RM]) read the report of the **International Relations Committee**. (See the article in this *HAD News*, below.)

There was no discussion.

SD, immediate Past-Chair, reported on the **HAD LeRoy Doggett Prize**. $10,400 has been raised. The **Committee** thanks Jane Ozenburger (widow of LeRoy Doggett) for her substantial contribution to this fund.

Nominations for the first prize closed on December 12, 1996. Three nominations were received. The Committee may consider additional nominees. The Committee's selection of the awardee will be made by summer 1997, and the first prize will be awarded at the January 1998 HAD Meeting.

There was no discussion.

DD reported on preparations for the 1999 AAS centennial. DD has been asked by the AAS to edit a commemorative volume. This volume, with articles by two-dozen AAS authors, will be divided into three sections: historical essays, personal rememberances, and reflections on how the AAS has changed since its inception. The latter will include considerations of the AAS's future, written by several AAS Past-Presidents. There also will be reports from each of the AAS Divisions and important committees.

The centennial volume publisher is AIP Press. Submissions are due at the end of the year. Publication will take place in 1998. A line item is being prepared for the next AAS dues renewal form, to allow members to pre-purchase the centennial volume.

DD referred to a display (near the 1997 AAS Meeting on-site registration) on the centennial volume. That display included a group photograph taken at the 1963 AAS meeting, held at Kitt Peak National Observatory. DD asked for AAS members' help in identifying all the persons in the photograph.

A traveling exhibit also is being prepared to celebrate the AAS centennial. A centennial program will be held at the 1999 AAS Meeting (hosted by Yerkes Observatory).

Discussion was invited. It was noted that key to securing a low price for the volume is getting an accurate number of subscriptions, prior to printing.

NEW BUSINESS:

1) KB has pointed out that, at AAS meetings, HAD sessions often conflict with Education sessions. This conflict is regretable because many astronomers have interests in both of these areas.

Discussion was invited. Robert Milkey will bring up this problem during the scheduling process for the next AAS Meeting.

2) DD outlined plans for future meetings. The HAD meets at least once per year, usually in conjunction with the winter AAS meeting. It also may meet in conjunction with the summer AAS meeting, if specifically invited to do so.

There has been no such invitation for the **1997 summer AAS Meeting** in Winston-Salem, North Carolina. Members still may present a historical paper at that meeting, however.

An HAD meeting in conjunction with the **1998 winter AAS Meeting**, in Washington, D. C., is planned. It will include a memorial session in honor of LeRoy Doggett. DD and SD are organizing one or two special HAD sessions for the Sunday preceding the AAS Meeting. These sessions will include invited and contributed papers on topics from the research areas inwhich Dr. Doggett was active (*e. g.*, calendars, celestial mechanics, archeoastronomy, and almanacs). There may be additional sessions on Monday, as well.

WS would like to invite Richard Stephenson to speak at this Meeting as a HAD/AAS lecturer. Dr. Stephenson was to have spoken at the 1996 HAD special session ("Applied History of Astronomy"), but the U. S. government shutdown prevented him from obtaining a visa. WS will speak to the AAS Vice-Presidents about support for this talk. They will meet this June. The HAD will pay for Dr. Stephenson's airfare.

The HAD has been invited by Wallace Sergeant and James Westphal (Palomar Observatory Director) to meet at the **1998 summer AAS Meeting** in San Diego. Part of the meeting would be a celebration of the fiftieth anniversary of "first light" at the Palomar 5-m telescope. There probably would be a June 7th afternoon tour of the observatory, preceded by lunch at the site. (Palomar will provide support.)

There is a possibility of having a 1 1/2-hour morning session of invited papers concerning the history of Palomar, on the 5-m observing floor. Another 1 1/2-hour session of contributed papers would be held in San Diego.

The HAD Committee has accepted this invitation, pending approval of the LOC. Judy Goodstein, at CalTech, will help with an exhibit marking the celebration. This exhibit will be on display in San Diego.

While there will be two HAD meetings in 1998, there will be no HAD meeting at the **1999 winter AAS Meeting** (Austin, Texas)--unless a compeling invitation is received. **The 1999 summer AAS Meeting** is the centennial meeting, and a HAD meeting in Chicago or at Lick Observatory is planned.

Discussion was invited. It was established that, traditionally, each AAS Division has been allowed to provide a Meeting lecturer, on a regular basis.

3) SD announced that IAU Commission 41 will meet in Kyoto, Japan in conjunction with the next IAU Meeting. The IAUC Meeting will be August 25-26; its theme will be "History of Oriental Astronomy." There will be more than twenty speakers. (Two other IAU Commissions will co-sponsor this Meeting.)

There was no discussion.

4) DD reported on the HAD Web Page. The HAD Page will become a "minisite" within the AAS Home Page. DD proposes to expand the information available on the Page and to name

RM as a third webmaster. Dr. McCutcheon already has available material to place on the Page, from the HAD-IRC symposium ("Astronomy and the State"), which took place in Washington, D. C. (The Web is a good place for much of this material as it is lengthy and includes many visuals.) The Web Page also is a convenient place for a list of Division officers, meeting information, the HAD Bylaws, and Ruth Freitag's *Recent Publications Relating to the History of Astronomy*.

Discussion was invited. Obituaries were added to the list of useful items to include on the Page. Because it is an AAS site, there would be no copyright infringement in doing so.

5) DD shared a request from WS that $100 be contributed by the HAD to the LeRoy Doggett Book Fund at the U. S. Naval Observatory. KB so moved. OG seconded. The motion passed unanimously.

6) DD announced that the HAD Committee will look into amending the Bylaws so that affiliate members can hold office. The Bylaws already have been amended recently so that affiliates can vote. The reason for this consideration is that the pool of available AAS/HAD members, who have not served as officers, has grown small. Meanwhile, some affiliates feel disenfranchised. He will bring this up at the next HAD Business Meeting.

Discussion was invited. The AAS Council must ratify such an amendment. If there is possible conflict with the AAS Bylaws, it was suggested that the AAS Vice-Presidents be "sounded out" beforehand.

7) As the meeting concluded, the Chair of the Division was turned over to the Chair-elect. This included a presentation of a new, color "Ich Bin HAD" plaque, carved by Ronald Schorn, to DD. SD announced new HAD officers. (See the article in this *HAD News*, above.)

The meeting adjourned at 14:00.

To be submitted at the next HAD Business Meeting,

Thomas Hockey

Treasurer's Report

by Steven Dick
Acting Treasurer (for 1996)

HAD Treasury

Starting Balance	
Chevy Chase Bank 1/22/96	$ 765.56
Income	
Dues forwarded from AAS	$1,000.00
Assets	$1,765.56
Expenses	
Postage	$ 662.66
Supplies	73.71
Bank fees	48.00
Total Expenses	$ 784.37
Ending Balance	
Chevy Chase Bank 1/19/97	$ 981.19

HAD Funds in AAS Treasury

Opening Balance 1/1/96	$2,400.00
Income	
1996 dues collected	$2,041.00
1997 dues to date	1,588.00
Total Income	$6,029.00
Transferred to HAD treasury	$1,000.00
Ending Balance 1/1/97	$5,029.00

TOTAL HAD ASSETS = $5,029.00 held by AAS Treasurer + $981.19 held in HAD treasury = **$6,010.19**

Doggett Fund

Opening Balance	$10,000.00
Donations posted to date	400.00
Total	$10,400.00

From the Departing Chair

I again want to thank Steve Dick and David DeVorkin for stepping in to the Secretary-Treasurer gap created by LeRoy Doggett's death last spring. Their work kept the Division running smoothly, and we are now delighted to turn over these duties to Tom Hockey, who edits and produces his first Newsletter with this issue. I also thank Richard Jarrell for his organization and hosting of the special HAD session on "History of Canadian Astronomy" at the recent Toronto meeting. Now to the future: the Doggett Prize Committee is now deliberating and will announce the first winner in time for him or her to give a talk at the AAS meeting next January in Washington, DC. At that same meeting it is planned to hold a session (on the preceding Sunday) commemorating LeRoy's life and research, in particular in the areas of archaeoastronomy, calendars, celestial mechanics, and almanacs.

HAD is an enjoyable division, and I've been pleased to serve as Chair. But as you'll see in another part of the Newsletter, you'll still be hearing from me in each issue. So good-bye in one role, but hello in another.

Woody Sullivan

From the Secretary

Through the editorship of this *HAD News*, I look forward to learning more about the history of astronomy and historical astronomy undertaken by members of the HAD. Letters, informal book reviews, and short contributions are solicited--and much appreciated! Speaking of appreciation, thanks go to Steven Dick for producing last year's issues while I conducted "hands on" research into the feeding, diapering, and nurturing of my newborn son...

Thomas Hockey
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Fax: (319)273-7124
I: hockey@uni.edu

Annual Report of the HAD International Relations Committee

by Robert McCutcheon, Chair

IRCHAD was established at the 1993 HAD Meeting in Phoenix to foster communication with historians of astronomy in Russia and other countries of the former Soviet Union. Currently, one of IRCHAD's two main projects is to provide subscriptions to the JHA for major Russian institutions involved in work on the history of astronomy. The second is to set up a WWW site with photographs, documents, and other materials related to the 1994 AAS/HAD session on "Astronomy and the State."

IRCHAD has established a special fund to pay for subscriptions, and to date a total of $300 has been collected through HAD member donations. On June 20, 1995, IRCHAD used $136 of these funds to provide subscriptions to the libraries of the Pulkovo Observatory and the Shternberg Astronomical Institute. This leaves a balance of $164. It is IRCHAD's intent to solicit additional member donations to continue these subscriptions.

In IRCHAD-related news, Bob McCutcheon is translating a paper by Irakli Simonia on the history of astronomy in Georgia, from ancient times through the nineteenth century. Ron Doel is working with Konstantin Ivanov, of the Tula State Pedagogical Institute, on issues related to international relations in science during the Cold War.

For further information on IRCHAD, contact Bob McCutcheon at (301) 497-2743, by FAX at (301) 498-8260, or by e-mail at Robert.McCutcheon@gsfc.nasa.gov or rmccutcheon@author.gsfc.nasa.gov.

Recent Historical Astronomy of the Terrestrial Planets

Thomas Hockey

University of Northern Iowa

[The following is excerpted from an invited presentation at the HAD topical session, "Applied History of Astronomy," held January 1996. The author was unable to attend, due to illness.]

Historical planetary astronomy refers to attempts to use archival physical descriptions of the Moon and planets to help solve modern problems in planetary science. These data are usually qualitative in nature, most often coming to us in the form of telescopic observers' reports and drawings made in the seventeenth, eighteenth, nineteenth, and first part of the twentieth century. Here I offer several recent--meaning the last ten years, or so--astronomical problems to which historical data has been applied.

The beginning of planetary astronomy would normally be the invention of the astronomical telescope at the start of the seventeenth century. (Here, by "planetary astronomy" I mean the examination of the physical nature of bodies in the Solar System, not their motions.) Yet I would claim that historical data from before the telescopic era has been usefully applied to lunar science.

I submit that the record for the earliest datum to be applied to the modern understanding of any planetary surface dates from June 1178, when a group of Canterbury monks witnessed, in the words of their chronicler, the "upper horn of a new moon split and from the division point fire, coals and sparks spewed out." Geologist Jack Hartung has used the timing of this event, plus ephemeris data for the Moon's orbit and libration, to ascertain its geographical location on the Moon. Furthermore, he has linked it with the presence today of a fresh twenty-kilometer-diameter impact crater. (This crater was named long ago--ironically, after someone who was himself put to the flame--Giordano Bruno.)

Others have pointed out that statistically, observation of the formation of a large impact crater anywhere on the Moon (or on the Earth, for that matter) within the last millennium would be a fantastic coincidence. They conclude that we should look to more-likely coincidences to explain the Canterbury observation (for instance, a bollide, the geometry for which fortuitously places it between the Moon and onlookers one English summer's evening). Hartung has responded to this criticism by suggesting that the Bruno impactor was a member of a meteoroid/asteroid stream that routinely bombards cis-lunar space. He proposes that it, the Tunguska Event (June 1908), and a June 1975 series of meteoroid impacts on the Moon (of record magnitude as measured on seismographs emplaced by Apollo astronauts), are all part of the June Taurid stream.

Less controversial in their existence (though not in their interpretation) are Lunar Transient Phenomena [LTPs], a term that applies to any temporary change in the appearance of the Moon's surface. Here, delving into historical reports is very important, because old observations exist from a time before the paradigm of a geologically inactive and unchanging Moon was established. In other words, it was more common in the past than it is now for telescopic planetary observers to include the Moon on their list of bodies to monitor for signs of change.

With LTPs, historical reports have been vital in establishing a data base large enough to be analyzed statistically. This was first done (actually, in the 1960s) by Jaylee Burley, Barbara Middlehurst, and others, who noted a periodic variation in the frequency of LTP reports coincident with the period of the anomalistic month. Peaks in LTP sightings at lunar perigee and apogee suggest that at least some LTPs are tidal effects. Various theories have been developed to explain this, including release of trapped gases and piezoelectric effects produced by tidal stress in lunar rock.

Historical records have been used in the study of what one observer called: "one of the oldest unsolved mysteries of the Solar System." It is the *lumiere cendree*, or Ashen Light, on Venus. The Ashen Light is a faint illumination reported from time to time on the dark side of the Venus terminator. It is often likened to earthshine, but as Venus has no natural satellite, there is no

obvious source of reflected sunlight to fall on this hemisphere of Venus. Alternate theories for the Ashen Light have ranged from rotting vegetation to volcanism to incandescent lighting!

The job of historical data in the question of the Ashen Light is, most importantly, verification that the phenomenon does indeed exist. There are no satisfactory photographs of the Ashen Light. Even today there are many who say that it is an illusion. The collection of a large number of reports of the Ashen light, over a long period of time and made by a variety of respected planetary observers (including Argelander, Barnard, Bode, W. Herschel, Olbers, Piazzi, Struve, and Tempel), lends credence to its being an authentic natural phenomenon: either an aurora (controversial because of the absence of a strong magnetic field on Venus) or lightning (equally controversial because of the absence of a water cycle on the planet).

A "hot topic" in historical planetary astronomy is the following: On Mars, globe-encircling dust storms have been observed to occur around the end of the southern hemispheric spring. (The best example is the storm coincident with Mariner 9's arrival at Mars in 1971; this storm enshrouded the whole planet.) Are they really a seasonal phenomenon?

Here, the historical record provides a cautionary warning: Leonard Martin and Richard Zurek's study of all known reports of large martian dust storms failed to demonstrate a truly annual pattern. Because the Mars perihelion is just before the southern summer solstice, Earthbased observers have a good view of the planet only at this time. Thus, there is a selection effect for observing storms then. Dust storms at other times can be easily missed. Even so, there have been oppositions of Mars, near perihelion, when no great dust storm was observed. (The importance of the periodicity of great martian dust storms is that such weather provides a mechanism for producing the unique laminated terrains seen on Mars.)

A common theme of the work reported here is the requirement for longitudinal studies. As the era of space-probe exploration among the Moon and planets is a mere tenth as long as that of Earth-bound telescopic exploration, historical data will be a limited but valuable resource to the planetary science community for a long time to come.

Selected References:

Burley, J. and Middlehurst, B. M. "Apparent Lunar Activity: Historical Review." *Proceedings of the National Academy of Sciences.* **55**, #5, pp. 1007-1011, 1966.

Hartung, J. B. "Giordano Bruno, the June 1975 Meteoroid Storm, Encke, and Other Taurid Complex Objects." *Icarus.* **104**, pp. 280-290, 1993.

Martin, J. J. and Zureck, R. W. "An Analysis of the History of Dust Activity on Mars." *Journal of Geophysical Research.* **98**, #E2, pp. 3221-3246, 1993.

Russell, C. T. and Phillips, J. L. "The Ashen Light." *Advances in Space Research.* **10**, #5, pp. 137-141, 1990.

Upcoming Meetings

[Some notices have been extracted from the *Electronic Newsletter for the History of Astronomy*, edited by Wolfgang Dick and translated by Donald Bellunduno]

7-8 March, New Haven, Connecticut, USA
Conference in Honor of Dorrit Hoffleit's 90th Birthday. Principal topics include: History of Astronomy.
Contact: Nill van Altena, e-mail: vanalten@astro.yale.edu

21 March, London, UK
Symposium on the Foundations of Newtonian Scholarship, to be held at the Royal Society.
Contact: J. B. Brachenridge, Institute for the History of Science and Technology, Cambridge, Massachusetts, USA, e-mail: brackenj@lawrence.edu; M. Nauenberg, University of California, Santa Cruz, California, USA, e-mail: michael@mike.ucsc.edu; or http://physics.ucsc.edu/people/personal/nauenberg.html

21-25 April, Vienna, Austria
Symposium "Pioneers in Solar-Terrestrial Physics during the 19th and 20th Centuries," to be held during the meeting of the European Geophysical Society.

Convener: Dr. Wilfried Schroeder, Hechelstr. 8, D-28777 Bremen-Roennebeck,Germany

16-20 June, Los Alamos, New Mexico, USA
A Half Century of Stellar Pulsation Interpretations - A Tribute to Arthur N. Cox.
Contact: Joyce A. Guzik, Los Alamos National Laboratory, Los Alamos, New Mexico, 87545, USA, e-mail: joy@lanl.gov

19-22 June, Notre Dame, Indiana, USA
Third Biennial History of Astronomy Workshop
Contact: Astronomy; Center for Continuing Education, University of Notre Dame, Notre Dame, Indiana, 46556, USA, e-mail:cce.cce.1@nd.edu

2-6 September, Gdansk, Poland
6th Conference, European Society for Astronomy in Culture (meeting will focus on "stars and the sea," "celestial maps from antiquity to Johan Hevelius," and "medieval astronomy")
Contact: Dr. Arnold Lebeuf, Department of Historical Anthropology, Warsaw University, Krakowskie Przedmiescie 26/28, Warsaw, Poland, e-mail: uzLebeuf@if.uj.edu.pl; or Dr. Marek Wysoczynski, Central Maritime Museum, ul. Szeroka 67/68, 80-835 Gdansk, Poland. (The meeting will be held in English and French.)

11-14 September, Chicago, Illinois, USA
North American Sundial Society, Annual Meeting Contact: Sara Schechner Genuth, National Museum of American History, Room 1040, MRC 605, Smithsonian Institution, Washington, DC 20560, e-mail: sgenuth@sil.si.edu

* http://www.astro.uni-bonn.de/~pbrosche/hist_astr/ha_meet_1997.html

Recent Discussion "Threads" on the History of Astronomy Discussion Group (HASTRO-L)

- Stars in Fiction
- The Book *Hamlet's Mill*
- The Beginning of the Calendar Year
- The History of Mesopotamian and Greek Constellations
- Planetarium Software
- The Field of View of Galileo's Telescope
- Clyde Tombaugh (1906-1997)
- Materials on the History of Lunar Studies
- Astronomical Lore of Shepherds in Provence (France)
- The Naming of the Planet Pluto

HASTRO-L is provided by Stephen McCluskey at the University of West Virginia. Subscribe by sending the following e-mail message:

SUB HASTRO-L [your name]

to:

listserv@wvnvm.wvnet.edu

Two Myths for Not Joining HAD!

Myth #1 - "I am not a "AAS member." No problem! From the HAD Bylaws: "The category of affiliate membership shall be open to scientists and scholars who wish to be associated with the Division and who are not members of the Society but who are members of other professional organizations actively concerned with historical astronomy. The Committee will specify the societies in which membership will qualify a candidate for affiliate membership. A person so qualified shall become an affiliate member, if formally nominated by at least 2 AAS members of the Division and approved by the Committee . . . Affiliate members will enjoy the same rights and privileges as other members except that they will not be able to hold elective office within the Division." Remember, affiliates are voting members of the HAD!

Myth #2 - "HAD membership is expensive." Not so! Annual dues are $8.00--less than the price of a pair of plates used in the Lowell trans-Neptunian planet search! (Affiliate members pay an additional $2 charge that accrues to the AAS.)

The HAD Mailing List

The *HAD News* mailing list was edited from a list provided by the AAS. If your name or address (as it appears on the mailing label) is printed incorrectly, please write, call, Fax, or e-mail the editor.

If you received a mailing label with a RED STAMP on it, this is our friendly reminder that your dues are in arrears. Please disregard it if you have made payment since 12/31/96. - T. H.

TRIVIA

From the Lucubratory

Woody Sullivan
(woody@astro.washington.edu)

This small corner of the HAD Newsletter is intended to be a wandering, sometimes whimsical, often eccentric, look at tidbits in astronomy and its place in culture. I welcome reactions, corrections, addenda, vilifications, etc.

The following passage may provide amusement not only for you, but also your significant other:

> Swithin St. Cleeve had tears in his eyes at the gentle banter of the lady...Seizing her hand he continued..."I swear to you that I have two devotions, two thoughts, two hopes, and two blessings in this world, and that one of them is yourself!"
>
> "And the other?"
> "The pursuit of astronomy."
> "And astronomy stands first."
> "I have never ordinated two such dissimilar ideas."

This is from the novel *Two on a Tower* (1895) by Thomas Hardy. We can all be proud that the hero is an astronomer, but unfortunately the novel as a whole is pretty bad, definitely not up to Hardy's usual standards. There are a few fine passages, though. For instance:

> He tried to give her yet another idea of the size of the universe; never was there a more ardent endeavour to bring down the immeasurable to human comprehension! By figures of speech and apt comparisons he took her mind..., compelling her to follow him into wildernesses of which she had never in her life even realized the existence.
>
> "There is a size at which dignity begins," he exclaimed; "further on there is a size at which solemnity begins; further on, a size at which awfulness begins; further on, a size at which ghastliness begins. That size faintly approaches the size of the stellar universe....
>
> "And to add a new weirdness to what the sky possesses in its size and formlessness, there is involved the quality of decay. For all the wonder of these everlasting stars, eternal spheres, and what not, they are not everlasting, they are not eternal; they burn out like candles....Imagine them all extinguished, and your mind feeling its way through a heaven of total darkness, occasionally striking against the black, invisible cinders of those stars....If you are cheerful, and wish to remain so, leave the study of astronomy alone. Of all the sciences, it alone deserves the character of the terrible."

Finally, a trivia question (actually it should be a quadrivia question, since astronomy as a subject was a member of the medievalquadrivium, not the trivium!): *What famous work in the history of science has a closing sentence that includes mention of a boat?* E-mail your replyand become famous by a mention here next time.

Winner of the last query (last May!) was Joe Tenn, who admitted, however, that he found out by doing a search on the Web! It turns out that Ugo Buoncompagni (1502-1585) was the name of Pope Gregory XIII, who in 1582 instituted the reform now known as the Gregorian calendar.

* * * * * * *

HAD News layout
by Nancy Howland
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