

THE

LETTER

FORUM

I.E.S. / NE

MEMBERS & FRIENDS

Bulletin #19

INTERPLANETARY EXPLORATION SOCIETY
New England Members & Friends

May, 1960

Next meeting Saturday, June 4, 1960 7-11 PM
look in the Adams Room Hotel Touraine Boston, Massachusetts
Tremont & Boylston Streets

Topic: THE DEAN DRIVE (Unidirectional Motion)

Speaker: E.E. Larrabee, who will discuss applications from the viewpoint of aerodynamics.

[Note: for members who want to see the original paper specifications, the Boston Public Library in Copley Square is a repository, and Stanley Cohen verified that they have a copy. If you send a quarter to Washington for a copy, write to the Patent Office and not to the Superintendent of Documents, who seemingly does not superintend patent copies - the secretary verified this part.] [Also don't miss the article in AasIF with calm photos and hot dialectic.]

Picnic Meeting will be extra, on Tom's grounds, Saturday, June 11

[Note again, that is 37 and not 57 Oxford Street in Winchester as typed in our last notices. Tom reproved us thrice about this, so please go there, and find him, and get us off this hook.] He cannot guarantee any veins of water under his land; but will bury a few treasures in case that helps any. Bring your own willow forks, bent rods, and the whole family, early in the afternoon.

Extra Agenda. Both Meetings:

ALL OUR MONEY

or

THE INTERPLANETARY JOURNAL

This outfit is possibly the only live IES group. If any other exists and is trying to boost the publication fund we have not been able to find it.

Somewhere, then, in a Wall Street Bank stands between five and ten thousand dollars waiting for moth and rust to corrupt, while one to two thousand subscriptions...well, see the minutes....

MINUTES

of the meeting held on Saturday evening, May 7, 1960; we had fewer here than last time. Isaac Asimov wrote to say that he had to be in Baltimore on business; Wayne Batteau was last heard from in California - usually it's Washington. Even the secretary strolled in at 8 PM and when twitted bout it, would only pat her thorax and talk about sea scallops - deelicious.

We worked out the vocabulary test demonstration among those present and will be glad to do more of this later if any more wish to take part. The time is not important as long as standard test conditions are met, for the good of the data. The conditions depend on tests.

The test we tried was Wilfred Funk's, formed to give statistical estimation of vocabulary size according to a random sample. The word list was formed by taking one at regular intervals, wherever that interval (in this case, 1509) should fall. There are 133 words from A to Z, which we multiply as 1509×133 or 200,697. This is the word count in the dictionary Funk used: other estimates of the size of the English language run up to 300,000. However, the test has the good points of being simple to administer, and being formed with no possible personal bias in the choice of items. It does not take much time to fill out and the premises are clearly stated and plain to see. It is interesting to see how much one actually does know - most people know at least 50,000 by the time they grow up. It is also very instructive to be reminded of all one does not know; for the words naturally vary in difficulty from very common to very rare.

It is unusual (except in our midst) for people to know more than half. We have yet to find one who knows less. Dr. Funk considers a vocabulary over 150,000 as phenomenal; we found four in a short sample. In common sense, we might expect as much, since our "anything" policy stands for a wide curiosity, surely the main reason for very wide vocabularies.

The highest score at this meeting was run up by Mrs. Larrabee, who then divulged that she had a dark secret: according to Johnson O'Connor's batteries, she has everything they are able to test for. As is well known, they correlate large vocabularies with executive ability; so naturally they yearned to know WHAT she was doing with ALL THAT talent. She seems to have found it awkward to explain to them that what she manages is three kids under ten and a contented-looking husband.

Actually, that figures. The Ieland Stanford studies which followed up some high-IQ young people showed that the boys tended to make good business or professional successes, but the girls all married and vanished. This club has one fabulous ladies' division, though.

Vocabulary and IQ was not delivered as a speech, it being too hard to get more than a few words at a time in edgewise, and it being more in the spirit of this group to gather objective data than theorize at large. The secretary, who holds a Binet certificate, promised to get a kit to test those three kids aforementioned. Schools collect such information and make much good use of it, but dare not give it out because it is so easily misunderstood. However, with a mama as bright as this, and with a well-qualified examiner -oh, well, the secretary has the next biggest vocabulary found so far in our group by this list, has long felt some natural curiosity about the problems of the far-out IQ, and educational use for the information, and is really in a position to be helpful.

Here are some of the causes for confusion: the subject is all mixed up with ideas of school success and status, especially in our culture where symbol-manipulation gets fancier as the very minutes go by. Tests are actually few, faulty, and variable, not only from test to test, but at various times for the same test of the same individual. Nonetheless this kind of educated guessing beats plain guesswork as the record can show. Schools, colleges, businesses and the armed forces use them more all the time. The area is really one in which the amateur scientist is able to profit, at least in planning for one's children.

This department of psychology is the only one which we are willing to call scientific. The data, such as they are, are objective; results are recordable, explainable and possible to duplicate. The norm is only a statistical average of facts as found, and is not based on any a priori judgments as to what they ought to be.

None, however, do more than indicate possibilities fragmentarily; and none guarantee how a talent will be used if it is untrained or held in abeyance by mistraining. Definitely, women are not competitive and will not seek positions that do not seek them, except under unusual circumstances. Then, too, there are matters of opportunity and suitability. Our members may comprise a lot of executive talent, but we are working out a very slippery broad policy in a superior-to-all-pecking-orders type of membership, finding our way as we go and deciding which standard procedures fit, and which don't. This, to switch a phrase, is a problem on the order of balancing four eels on their tails (except that it may be more useful if we can do it) and it is small wonder that operating agreements have been slow to reach. We set a precedent about dues, a five-dollar check from Janet (Space Child) Freeman was taken in for dues to this club instead of sending it along for the subscription fund as we have been doing. No other business transacted or dues collected at this meeting, although an anonymous donation of \$20 has come in, so the rent is paid this time without the secretary shelling out. About the sub fund -

The club officers were also empowered (subject to veto if many of our regulars write in to object) to seek a conference with officers in New York in order to find out what goes on, and whether it can be accelerated somehow. Tom will be in New York this month for a chemical society conference, and Alma has family reasons to go in June. We are seeking information about publishing costs to find out whether we are stymied on the \$15,000/Street&Smith minimum.

The original agreement with Street & Smith may not be binding since the company stock has been sold and there may be management changes. Presumably they would use a subscription backlog only to raise funds, hire printers, and gamble on national distribution. We ourselves would be just as well pleased with a subscription direct-mail arrangement. If we use multilith or stenofax we could obtain handsom appearance and might have funds enough for quarterly or more frequent appearance.

To be sure, the original agreement specifies that if the minimum sum is not reached, the subscriptions are to be refunded. This we do not wish, and are therefore happy to report that there are one or two nice hitches, which make revision the better solution.

For one thing, it is impossible to refund the subscription to all the original subscribers without hiring detectives. People move. We're still looking for one of our original 25 in New England. Even when the postoffice has a proper forwarding address, it only carries it for a year. During this year two more of our members have moved. If we don't move reasonably soon we will be lucky to reach half the list, we cannot reach all of it as of this minute.

For another thing, who is to decide when to give up raising more funds; who is to authorize refunding, and who is going to pay for all the postage and clerical work, to say nothing of hiring those detectives? If we are the only extant live group, we could perhaps help, except that this is just what we don't want.

Most important, all the published records indicate that the sums raised are FOR the purpose of Publishing a journal OF the Interplanetary Exploration Society. I have talked with founding officers and am sure that the society is senior to the journal, just as these prepositions indicate, and that a lawyer ought to see the force of this - especially if he wants to.

Thus the problem resolves to only two practical questions: can we find enough interesting materials? Answer: and how! And then, can we revise our estimates of cost to a more modest budget? Answer: we are after that information now. There is one thing unquestionable: we don't insist on a glossy slick (si monumentum requiris, circumspecte)

-ohyes, should've mentioned that Tom brought in a very well-chosen lot of books about words, including Korzybski, Hayakawa, Wendell Johnson, various magazines with articles, and a beautiful copy of Asimov's "Words of Science", which the printers made such a labor of love that they won a prize for the design of the book. He has also mentioned three Pergamon Press books which you may want to check at the public library:

"The Other Side of the Moon", issued by the USSR Academy of Sciences (a nonmember informs us that an explanation of how the pictures were faked has appeared, but gave us no reference - anybody know if this is so &c?)

"Vistas in Astronautics" Vol II Ed. Morton Alperin & Hollingsworth F. Gregory, USAF Office of Scientific Research.

"Beyond the Planet Earth" by Konstantin Tsiolkovsky, Tr. K. Syers Plebeian but convenient magazines for general readers:

Science Digest: published by Popular Mechanics Company, oversimplified and not too readable, but containing many references that look worth hunting down, maybe, depending on, &c; here are some examples:

"Electric Power From the Sun", from Electronic Age, RCA quarterly - Reflecting discs, Solar cells, and thermionic converters.

"How to Take a chance" by Darrell Huff, 1959 W.W. Norton. Electronic tracing of probability sequences with business applications.

"Trying to Talk With Other Planets" by Arthur Koestler, in the London Observer. Planetary semantics-oops, interplanetary, (there must be such a word after all) consisting of checking radio-telescope signals for anything less than random noise "with the face-saving semiseriousness which is the fitting scholarly attitude on approach in the fantastic." Example: if we read 9...16...25, we would be entitled to suppose that somebody away off in that direction knows Pythagoras' theorem. 1...3...6 would do, if theorems are few...

"Mankind in the Making", by William Howells, 1959 Doubleday. Maintains that evolution had to culminate in us, but does not have to repeat - makes it seem plausible while you have the book open.

Saturday Review of Literature: the book-reports on novels are much too mauve, but they have the honesty to turn scientific books over to some reviewers who seem to know their stuff and are readable too. A mention of the runaway-best-seller on scientific dominos appeared in SR several months before Life magazine caught up with it.

Science World, developed by JWC Jr. and a wonderful thing while he had it. S&S sold it from under him to Scholastic, a company which gets a lot of chalky written-down stuff out for classroom use in English and social studies and hasn't ruined this one yet. It never had decent promotion from S&S - we feel that they stupidly sold off a gold mine.

POSTAL

Bruce Berry (Moon Archeology, see previous bulletins)

c/o Burmeister Studios, 205 West Wacker Drive, Chicago 6, Illinois

"I am sending some material on the twin-planet theory...I will go into more detail later." [the sketch of Lunik's orbit is one he spotted and sent, with the comment that the polar orbit is what would be an infallible way to hit the other of a double planetary system.] that is, he clipped the drawing which the secretary should have copied into the bulletin long ago except for crushing sense of personal inadequacy for that kind of drafting - but the notion is so fascinating that she just did her best and yonder it is! "What Andy says concerning missile trajectories sounds ridiculous!" [Andy says that you can't plot a moon shoot by a single formula or smooth curve, and Andy does know his astronomy. He says they have to figure the angle and velocity until it gets away from Earth far enough so that the gravitational influence is notably less; then they have to correct later on for increasing solar and lunar gravitational effects, and so on along by sections? -if we are quoting his remarks properly.] "It sounds like the ancient magicians who babbled a string of numbers, crossed their fingers, and hoped for the best! Science is wonderful!! "

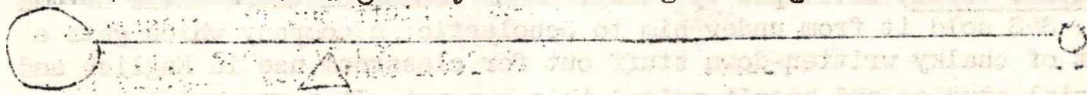
[Anti-intellectual tirades and any shortness of temper notwithstanding, it does seem that Andy is correct in pointing out that Sun, Moon, Satellite, and Earth constitute a four-body problem; we keep hearing that no formula exists for such a trajectory. So if it is actually practical to reduce it to a two-body problem, FUN!]

Art Hayes

R.R.#3, Bancroft, Ontario, Canada (Uranium Mining & Refining)

"The Bruce Berry diagram* makes only a vague bit of sense to me, since it is so far out of my line. All it tells me is that what he claims with the diagram MIGHT be, but I don't know if it CAN be. If that sounds confusing, you can bet that it indicates how I am..."

*Diagram was shown in a midwinter bulletin; Earth, Moon, and a lunar orbit were represented and a common center of gravity shown - we may be even more confused, but it somehow reminded us of a linear balance, as for instance when two different-sized kids will balance on a seesaw by shifting the larger nearer the fulcrum so that the center of gravity is about right - e.g. this illustration:



Please don't take this



NEXT PAGE

sketch VERY seriously

for one thing alone:

it is based on a press release
and from TASS at that,
furthermore + worse

the original was photographed
& printed in a Chicago paper
(copied by AP)

Followed blindly
→ ~~Applied~~ by yr. secy. who is
~~not~~ ignorant of

(A) Cyrillic (B) RUSSIAN (C) ASTRONOMY (D) DRAFTING
& equipped only with a ruler

It ^{is} ~~is~~ most ^{lordhelpus} be full of M*I*S*T*A*C*K*S
BUT

Bruce Berry, who clipped this, points out that
it treats Earth-Moon as a DOUBLE entity

with a Common Center of Gravity
(+ thus satellite)
reduces trajectories to a TWO(2)-body problem.

Art Hayes continues:

"We have some meetings, once a month, that might be compared in some ways with those meetings of yours. The next one will feature films and discussions on "How a Thermal Reactor Works" and "Radioisotopes in Industry." The last one showed a resumé of N.H.L. Hockey.. and an oyster feed. Sometimes we get some subjects like Geology in Ceylon, other times it is on the metallurgy of some metal...

There is nothing in the uranium milling end that is of a security rating. Writing it up, however, would be of interest to very few, is something much harder. I tried that with OMPA and the response was pitiful, most of the responses being against anyhow. You run into that when you are trying to explain one technology to those mainly interested in other types of technology. If you leave out the technical jargon, either you have to explain at length, each step, and the result is that you bore everyone; or if you include the jargon, few will understand...

Back to those meetings of ours, only a small portion of the meeting is part of a program. Most of it is mainly bull session, of separate small units scattered through a fairly large hall. Small groups get together and yak about anything, rarely having to do with our work interests. These meetings are always stag affairs. Our attendance varies from 50 to 200."

Tom Hill.

37 Oxford Street, Winchester, Massachusetts - also in the phonebook
"Re: the 11th...Lois will serve coffee, hamburgers (we'd get enough, and freeze any unused, so a reasonable fluctuation in numbers wouldn't hurt) and potato salad. Cookies with the coffee...

((We requested a list of the books Tom brought to the last meeting and he here mentions those already noted; also Stuart Chase, "Proper Study of Mankind" and various copies of two periodicals: Science (American), and Nature (British) and included with this note a photocopy of book review in Nature, dated April 30, 1960: "Water-Witching U.S.A." by Evon Z. Vogt & Ray Hyman 1959 Chicago: University of Chicago Press; London, Cambridge University Press))

"Re: Your letter to Todd: Go ahead and see what you can develop. I phoned Saturday PM, no one around. Didn't have a minute Mon & Tues last; meetings lasted too long; driving home Tuesday; therefore "no progress" by me..."

Also note condensation in Readers (you should excuse the expression) Digest, May '60 from Redbook "Your Child's Intelligence is Not Fixed" - fascinating mixture of horse sense and horse feathers...

POSTAL

Charles Wallach,
Imm. Mohammed Abdul Rahman, Rue Verdun, Fayoumi, Beyrouth, Liban,
says thanks for news of "John Campbell's I.E.S. I am interested.
I have left the Embassy and gone into business for myself; I will
continue to make my residence in Beirut. All this has occurred
within the past 60 days, and I am sure you can appreciate the flap
in which I now am in which.

I will admit having "crackpot or other" ideas, but the foregoing
is an excuse for not offering anything immediately.

Please put me on the mailing list for a membership application,
and I will aspire to contributing a little later.."

- copy -

U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

ADDRESS REPLY TO
NATIONAL BUREAU OF STANDARDS
WASHINGTON 25, D.C.

IN YOUR REPLY
REFER TO FILE NO.
2.03

February 25, 1960

Mr. Thomas T. Hill
Atlantic Gelatin Division
Woburn, Massachusetts

Dear Tom:

It was very kind of you to send the literature, Tom,
particularly the monograph on gelatin which I had not seen. John
Campbell wrote to me and mentioned his article on two-primary
color photography so I had been on the look-out for it. I'm
sure that he would be pleased to know that I make a regular point
of quoting from the opening paragraphs of his editorial of August
1959. There were other anti-intellectual tirades that followed
in the wake of the Land "disclosures" but his editorial consis-
tently gets the biggest laughs. I have not had time to continue
correspondence with him since his letter in which he said he
didn't have time to read the literature.

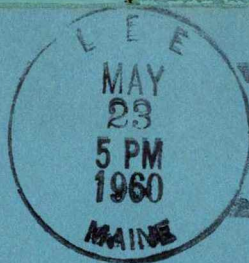
It looks as though I won't be able to make it to the
Boston banquet --- much as I would like to.

Thanks again, Tom.

Very truly yours,

?s/ C.S. McCamy, Chief, Photographic Section, Optics & Metrology Div.

Alma Hill
Lee, Maine



First Class

Contents: Printed Matter
May be opened for Postal Inspection

*John Butterworth
37 Richmond Road
Belmont
Massachusetts*