

BLITHERINGS #3

Published for Fapa by Chandler Davis AS VI2, Eliot EI2, Cambridge 38
Mass. I wish it could be quarterly but it can't.

This ish is being stenciled on a stinky portable & mimeographed by the bountiful Mr Stanley, to whom all thanks. If there is a beautiful cover stration it is the going of my cousin, FemAnn Davis of Mt Holyoke; if there is not it's because I didn't have the time or industry to run it off after she had cut it.

A change of policy this time is my reversion to English as a mode of communication. This change is permanent. All the invective of the Searleses would not have altered by a tittle my predilection for judicious misspelling, had not several faps reported that my linguistic eccentricities kept them from reading the magazine. This sort of left me with no choice. Because I do want these pages to be read, if only in order that Lancy may find more outrages to protest.

Blitherings will be unique among servifanmags in omitting any extended reference to the editor's station, his duties, or his experiences with the military. He would not have very interesting reading. In fact I could dispose of the subject in one sentence, but if I did I would be breaking one of the Unit regulations. So just skip it.

"We cannot consent to allowing our own patriotism to interfere with our duties as trustees." --Pierre Dupont

Blithering Retorts to the last 2 mailings

FanTods #7. Interested by the statement that Bertrand Russell is "likely the most intelligent man alive."... But if the Guy with Goggles is like the corresponding character in either of the stories I cited (Greater than Gods & The Flight that Failed), he isn't worried about getting himself onto the new timetrack, but in getting the world onto it. Such, at least, was my interpretation.... No, no, no-- I don't re-define either "God" or "believe in". I claim that none of the characteristics commonly associated with "God" distinguish God significantly from the remainder of the observable universe, with the exception of the prayer-answering property. Comprehend? The God some expound, who created everything and haan't been heard from since, is logically equivalent to the whole universe.

Blitherings #2. & now it turns out that Wesley Long is George O. Smith. Yet my blast at the former is much less applicable to the stories written under the Smith name, with the exception of CRM Interplanetary.

Banshee #1. Marlow's mention of shelving of technological improvement by monopolies & cartels points up the need for government supervision of such after the war. The alternative to supervising is curbing and impoverishing them by Thurman-Arnold-type henpecking; which alternative is best, is an open question and an interesting one. FDR hinted during this campaign (in the Chicago speech) that he would take the second course. But this attempt to stem what is definitely a secular trend toward consolidation in industry seems about as silly as the short-lived pig-killing experiment, and incidentally would hardly be salutary to technological progress.

Perhaps Ashley will accuse me of inconsistency in decrying the holding up of inventions by monopolies more than by unions. I think unions are justified in delaying the introduction of new processes that would throw large numbers out of work in a short time. If the introduction is gradual, (1) men will be displaced no faster than they can get new jobs, and (2) older men skilled in the outdated method will conti-

due in their trade until retirement. & will certainly benefit society more in this way than they would at an unskilled job or on relief. Unions' opposition to new processes is in proportion to the importance in the particular industry of those two factors, & in general does society considerably more good than otherwise. As a rule labor does not oppose a new process any longer than those two factors require; it's found by experience that such things as make-work rules don't work. Those cases of excessive retarding that do occur are definitely culpable but they are less common than you seem to think.

When it's the monopolies instead of labor, it's almost always culpable. Why? Because the economic dislocation due to the changeover is not reduced by capital's postponing it as it is by labor's prolonging it. That distinction is essential. I am certainly not in favor of technology at the expense of human happiness, and labor's occasional opposition to technology, unlike monopoly capital's, ordinarily constitutes a defense of the standard of living.

Caliban #5. In re your quote building up the "wisdom" of the "classics," I refer you to "The Breakdown of Modern Philosophy" from Etienne Gilson's The Unity of Philosophical Experience. Gilson agrees with Waller & you, but states the idea more clearly, thus making its absurdity more obvious.

Horizons: Agree with you on Beethoven Sonatas, also on movies....Your educational program is excellent, though it probably would have rubbed me the wrong way if I'd been put through it, me with my academic ability & mechanical morosity. But it is true that most grammar school "students"-- inmates-- have so little interest and so extremely little patience that most of their school time is wasted.

Phanny 3/2. Thanks for the following: "It is all very well to talk about a man working out his own destiny; but if he is placed in a hopelessly bad environment as a child, he may find that he is working with factors over which he has no control, and for which he knows no cure." I've been trying to convince Mrs Swisher of that for nearly 2 yr now....Your comments on education rung quite as definite a bell as did Warner's, & were a good deal more applicable to my case, I having suffered for lack of such special classes for superior students as you propose. I was allowed to skip too many grades in grammar school, throwing me in with kids too much older than myself to accept me as anywhere near an equal. Finally, I voluntarily retarded my education a yr; & when that is the only solution you can resort to, something is lacking somewhere.

Another thought on education: a great many college profs are simply brilliant scientists with no ability at all for teaching at the elementary level. You can't object to the college's employing them, for a position on a faculty gives them more freedom to pursue their own researches than would most alternative jobs; but it'd be a lot better if the govt subsidized research so that the hiring of teachers could be purely on the basis of teaching ability....

The point you miss in your discussion of world cooperation is that with world trade what it is the point is about to be reached where geographical distinctions will become of secondary importance. Economic rivalry between regions will be less important than ditto between classes: the interests of a textile manufacturer in England will resemble those of a steel manufacturer in Japan more closely than they do those of a textile worker in England. When that point is reached, there's no doubt that amalgamation of national govts will be the order of the day. Right now, I'm in favor of the strongest world congress the

United Nations can set up, because I think that will hasten consolidation, & I think consolidation, though no p naacca, will be a good thing. ... "The physical means of eliminating slavery are now available"-- good! Let's eliminate it.

So Saari 1/1. Mathematics? That's my dish. Try these: (1) What is the ratio of volumes of a regular octahedron and the cube having a vertex at the center of each face of the octahedron? (2) On the tangent at a point on the spiral $r = ce^{\theta}$, find the length of the segment cut off by the next arm of the spiral. (The exponent of the "c" is supposed to be a theta, in case you're wondering.) (3) Inscribe the triangle of maximum area in a given ellipse. (The solution is not unique.) (4) Through 3 points pass the ellipse with smallest area. The last problem is extremely tough... Characterization of a brain as a "randomness machine" very good.

Black & White: Ackerman, unfortunately, sounds much more emotional & prejudiced than Speer.

Inspiration 3/1. Wings on a rocket? Maybe for landing, but I don't know about the takeoff. (V2 depends not at all on wings.) Likely you're right about using jet propulsion as long as the rocket is in an atmosphere. Swisher points out that if energies are the same, a fuel with large mass gives greater increase in momentum than one with small mass; this is another argument for the jet.... I don't think footballs are thrown to rotate on their axis to escape the effects of air currents; more likely because (1) this method of throwing assures keeping the c.g. of the ball in line with the applied force, & (2) it prevents the ball from spinning endoverend like a placekick (placekicks are plenty hard to catch).

Milty's Mag. Addenda: SOL, meaning-- or, Sadly Out of Luck, is a pretty old abbreviation (Louis Armstrong recorded the SOL Blues around 1928); it's used a good deal around here. Widner supplies CS-- Chicken Stuff; viz also speaks of Bat Stuff. (Once again, interpolate nonSpeerian words.) As for explainin' "brown-nose" in a family publication-- simply give a synonym. A brown-nose is an AK-- a TL.

A Tale of the 'Evans 2/3. I don't like your system of commenting on the mailing. Only 2 unfavorable comments & 2 impartial; everything else was fine! good! excellent! more, pliz! If you wanted to save stencils you could just begin by listing the 4 exceptions, & then say, "Everything else in the mailing was fine! good! excellent! more, pliz!" Which of course would not be true.

FanDango 2/1. Boy, I'd like to see that collection of jazz records! How do they run-- Morton? Louis? Fik? Ellington?... It's easy to see why Laney disparages attempts at recruiting new fans; if I shared his boundless regret for even belonging to fandom I too would think recruiting pointless.

Variety. Out of the 20 or 30 fans I have known, one was homosexual, & the remainder were, as far as I could tell-- normal! Of course, I don't have Yerke's imagination.

FA 8/1 (we're on the Fall mailing now, fellas). But the Chief Critic had no comment on 10 zines.... There can't be as much deadwood in Fapa as some claim; only 2 names listed for Activity & Dues Activity in the SecyTreas's report.

FanDango 2/2. Good old blood&guts.

Listen, Fran old man-- if you don't like fans that's that; you've expressed yourself on the subject, now just retire into your corner & say no more. My eyes will stay dry. But before you leave our despised company I would like to clear one thing up. The amusement I expressed in Flitherings #2 was aroused only by FD #4's blatancy, & did not express any opinion on the value of fandom, of alcohol, or of copulation. If you like I'll put myself on record on these questions, omitting the first however, the Value of Fandom being the most over-discussed topic in Fapa.

Alcohol: I agree with Ashley on this, more or less. An occasional binge is desirable, steady drinking not. I once for a period of a month had at least 2 shots of rye or brandy per day, & frequently much more. This was pretty stupid.

Copulation. Fornication, often quite OK. Adultery, pretty ratty. Yes, either is better than the monastery.

Lest my comments seem to deal too largely with myself, I should point out that while my natural ego compelled my replying to Mr Laney's irresponsible attacks dealing with me, nothing else was comment-worthy in his submission to the mailing (which I read).

Banshee. Speer wants to know the connection between "equalitarianism & collectivism." Well, in the first place, the majority of blacks have the same economic interests as the majority of whites, & these interests can be furthered by unity between the groups. The necessity for unity during the war (a consideration which seems to move you very little) is a particular case. But besides this argument, which you will probably attack as mere practical politics-- I think the definition of "progressive" almost answers your question. I'd define the word as "anyone interested in the abolition of special privilege," & privilege includes the headstart you want your children to have over their Negro contemporaries. & progressivism & collectivism are connected.

Yhos #11. I read all the material on & in shorttype, & find it quite easy to follow. You haven't quite got it down pat, tho; e.g., you sometimes write "i" instead of "z" for "is".

Milty's Mag. No doubt you agree with me that publication of Swisher's rocket paper and similar stuff, if only in Fapa, would be a worthwhile project.

Agendbite of Inwit #6. The little essay on wareslavery, capitalism, & socialism was very good. Addendum: You didn't make clear that even in periods of extreme prosperity unregulated capitalism can never be an economy of abundance in the true sense of the term.

Paradox 2 #4. It may or may not have come to the attention of Fapa that Angelica Gibbs's famous New Yorker article on stef was anthologized in Readings for Citizens at War, one of the editors of which was my English A instructor. So help me, I tried to talk him out of including Miss Gibbs's libelous attack... But, Prof Tucker, suppose you go back an hour in time before setting the watch, & then set it backward instead of forward? Then you could come forward in time as many hours as you were west of Greenwich, and be exactly adjusted to Mountain Standard Time, provided you turned your watch-hand through one complete revolution while the machine was in transit.

anidea. Draftsmanship good, lettering excellent, idea poor.

En Garde "11. I scored only 1 on the quiz, unless you will admit that (1) not all 3-f magazine covers re printed-- is En Garde's? (2) not all fantasy stories are submitted to the editor in ms form; at least I thought I remembered reading that Koenig mailed one of Hodgson's stories to Mary Bnaedinger....God, Ashley, if I shared your physical peculiarities I'd keep quiet about them! & wear a shirt at all times. Can't let people know you're superior, you know.

Sappho 175. Some of these are too obvious (The People Perish, Figments) some too affected (Halcidoscope in s wingtime, To Sylvia). I think Mebane's sonnet on Merritt's, of course, the Eliot reprint, hit the nail most nearly on the head.

Horizons 6"1. Didn't feel quite up to tackling Balzac's antique French. What was it about?

FanTods "1. That's right, Russ, healing of nerves across a cut involves no formation of new neurons. Each nerve is actually one cell all the way from the spinal cord to the sense organ, muscle, gland, or whatever. When the nerve is cut everything from the cut out dies; but its decomposition products apparently are used by the cell in rebuilding the axon (or dendrite)...The P Schuyler Miller excursion into relativity was one of the most amusing fallacies I've seen....Sure pi would decrease around the dwarf star. Remember that light, by Fermat's Principle, follows the shortest path in a homogeneous medium. In the neighborhood of a dwarf star the deviation of the light beam from the path predicted by classical physics is such as to give its direction a larger tangential and a smaller radial component. So-- As for the rotating wheel, the Lorentz-Fitzgerald contraction acts in the direction of motion, so again pi decreases. It's funny, though, because in one respect the two situations are opposite. An observer on the wheel, unaware of the outside universe, would say the rim was accelerating toward the center; a similar observer on the star would say the surface was accelerating outward....

Why isn't labor as much a prowar bloc as business, you ask, since it benefits from war? Neither labor nor big business as a whole consciously provokes war. The exceptions, however, must be in the case of business because labor has no organizations other than mass organizations & could not so easily keep secret any war plans it might have.

The important thing is, tho, that under certain economic setups the normal profitmaking activities of business lead it to actions whose eventual consequence is war. Remember that altho Morgans & Vanderbilts are among the casualties of the war, the directors of a corporation don't think of son & nephews when determining policy, they think of dividends; that's their job. Neither do they look as far ahead as the postwar slump. If one firm, in a boom period, whether an armament boom or a normal upswing in the business cycle, should refuse to take advantage of it when everybody else was investing to the limit, it'd go broke. Even knowing that by its arms-building, or by its overinvestment, it was contributing to the severity of the coming debacle, it would have to figure as follows: The debacle will come anyway; our influence is too small for its withdrawal to change that, & if we fail to take part in the armament drive, or the overexpansion of credit, we will be less well prepared to face it than other firms.

Figuring that way, a corporation is often easily persuaded to finance a Hitler, or ship scrap iron to a prospective enemy. ' all this

omits, of course, simple treason....

So Rayn has an obsession on Nazism, huh? Good! Good, let's have another expulsion....Malcolm Jameson's space war proposals impressed me at the time but don't any more. Had I the mag at hand I'd refute them, but I don't remember what kind of motive power, if any, he suggested for his "space mines." The difficulty of intercepting a space armada remains staggering anyhow, whatever is offered in the way of weapons usable once you have detected the enemy & matched speeds.

Nucleus. This mag is unique in that I am almost uniformly in enthusiastic agreement with all its contents. Remarks on college life; on teaching; on Negroes; & on unions all to be double-checked.

Sard 3/4. Buck has told me flatly that he does not want to stay in Tapa, which makes Russ's contortions to keep him in sort of silly.... The report of the Stranger Mtg was in spots incomprehensible to me, & I was there....I won't take you up on all the replies you make to Elitherin's #1, since the controversy is old & apparently our divergence is not great. But-- sure, nature is concerned only with a man's ability to stay alive & produce children. I still say kindness might be prosurvival. If you are aghast at my assumption that because altruism exists in us it must at some time have been prosurvival, cite such contra-survival traits of common occurrence as homophilia & asceticism, I will stick to my argument. First, you do not deny that altruism is hereditary. Now the traits you use as counter-examples are all of rare occurrence. They are either produced by new mutations, or brought out by the chance meeting of identical recessive genes (or are not hereditary at all: asceticism). Altruism, on the other hand, at least rudimentary altruism, is so universal that the necessary mutations must have occurred long ago, & defeated their competitors. They, unlike your examples, have been exposed to & survived tests on their survival value.

The Mad Muse. Misnamed. Gray is not mad; not, in fact, mad enough. His lack of eccentricity does not weaken his nonfantasy poems, but resembles banality when brought into contrast with the fantastic nature of some of his subjects. Inferior to the Eby collection.

"It isn't really much good."-- Henry Shino, lending me this typewriter.

Outgrabings

Tomorrow

by Percy Bysshe Shelley

Where art thou, beloved To-morrow?
When young and old and strong and weak,
Rich and poor, thro' joy and sorrow,
Thy sweet smiles we ever seek,--
In thy place-- ah! well-a-day!
We find the thing we fled-- To-day.

"Casual labor is often badly-paid, not because it gets less than it is worth, but because it is worth so appallingly little."-- JR Hicks, Theory of Wages. Marginal note in pencil; "(A broad statement)" 2nd marginal note, in ink: "--Eolshevik."

Definition: Anyone less sophisticated than myself is naive, anyone more sophisticated than myself is affected.

-1-

Answer to Norman F. Stanley

by Saville Sax

Norman F. Stanley, writing in *FanTods*, asks, How can the organization in which the elected officers of labor take over industry be democratic, when management would not be represented in the arrangement? Now I should not like to accuse Stanley of writing by free association, but, I think the word "management" popped into his head in connection with labor because that is a habit of thought, and not for logical reasons.

If he had read my article carefully he would have seen that it tried to find a democratic way of determining who should manage industry, and how it should be done. We decided that the best way of determining is to have the workers elect the managers, because they would be in the best position to judge their competence. Perhaps Stanley meant that the present kind of manager should meet with the future kind of manager elected by labor, in a bastard democracy of the past and the future. This kind of logic would with equal justice allow us to claim that our democracy isn't democratic because we haven't the representatives of 18th-century monarchy.

But our present managerial system enthusiasts really have less grounds for claiming that including or preserving our present type management will lead to democracy than American monarchists have for wishing an American monarchy. The British when they had outgrown monarchy preserved their king as a kind of show. But our managerial system is too ugly to survive even in that form.

Our present managers control billions of dollars of wealth while they sometimes own less than one-half percent of the shares. They are elected by proxy ballots which few shareholders ever fill out. Most of the persons who own shares, since they bought them purely for speculative reasons, do not give much of a damn how the corporation is run. Most of them do not even get dividends, which are nicely divided between the large stockholders in the form of huge managerial salaries.

Is the inclusion of these frauds among the managers elected by the workers going to make them function more democratically? I think not. The complete abolition of our present managerial system is the only thing that can make it democratic.

"To idealize is to divide reality....We may be given a spoonful of the Atlantic Ocean and we may be able to distinguish it from a spoonful of tea. And those who cannot recognize a spoon as an ideal will at least be able to see that it is an idea." Footnote: "This joke will annoy a number of readers." --WJ Turner, Beethoven

Question on the last History of Science 2b final exam: "Why on earth did you take this course?"

Relativity: The square of the distance between two points in the space-time continuum may be positive, zero, or negative. (A point in space time is, of course, an event.) If the value is positive, there is some observer who will say the two events occurred in the same place at different times; if negative, some observer will say they occurred simultaneously, at different places; if zero, all observers will say they differed both in location and in time. The relativistic distance between the emission and reception of a light wave is zero.

Poems

by Saville Sax

I.

As a billion far-flung pieces of ourselves embraced in molten
heat
A bit of you and a bit of me kissed in a rain-drop of some
ancient sea.
We were spread and flung through the ages
As rocks and soil and leaves.
And now together all these pieces
A miracle of chance and fate.
So let us kiss again.

II.

Two men are three
Two of themselves
And one of each other
The flock of separate birds is bound
By borrowed imagery of God
The leaves pressed flat against the sun
Form a pattern for the tree
And the single earth and single sky
Make forests one.

III.

A million different universes walk the streets
See this man's wife in an eye
See this man's child
And through the separate living windows
Shine in the different skies.
A brotherhood of worlds is made by each objective star.

IV.

The general orders
The soldiers are impelled
The women and children with shovel in hand
Fall to the fresh dug soil.
Soldiers throw their guns to their shoulders
And walk with feet not their own.
Halt, says one. It's done.
Turn to your barracks.
It's done, it's done.
They sleep a dreamless sleep.
The dreams are somewhere. --
Between the finger, the bullet, and the command, guilt
stands.

Unanswered

by Chandler Davis

A thousand stars float in the pool of night,
A host wind wanders through the phantom trees,
Silence. . . .

Star-woman, why have you come to me?
Why are you standing there so like a dream,
Like the vain dream that nicks my hopes by day?
Why in this phantom world no rest, but you,
So like to her, must come unbid to me?--
Vain locks of hair across your star-lit cheek,
Like the soft fingers of the fairy wind--
Painfully fair you are, like this night-world,
Which is not surcease, nor escape from day,
But just its echo. . . .

Why is there no escape,
Evil in the night, among the thousand stars?
And why within your eyes what I have soon
So oft in hers, these lightless, hidden depths
That draw me? . . .

Star-woman, since I cannot fly,
Since hope of that was gone once you appeared,
Kiss me. -- This was why you came, I know. --
And passion bursts forth like a meteor-shower,
Filling the night, and like the shooting-stars
Dies into the night's dream, silently.

Descendant

by Chandler Davis

Dark street. The winter mist condensing cold
On brick walls, and on blank extent of pavement
Reflecting streetlights. Square and lifeless buildings,
Weeping blackly from their many eyes:
Retreating rows of weeping monoliths
Flanking retreating rows of stubborn streetlights.

Dark street. Between the right and left-hand lanes
The car-tracks rise from the subway's mystery,
Silent and blank. But now, endeavoring
To make its wheels' noise heard in the deaf mist,
A car merges into the winter-- filled
With deaf men. Throwing its light belligerently
Against the blind mist, knowing itself defeated,
It follows retreating rows of kindred streetlights
And is gone.

The dark street's blankness, as before:
The subway tunnel mouths a muffled dirge:
Square buildings
Weep blackly.

Without End

By Chandler Davis

So long as there are things I do not know,
There always will be things that I must learn;
While skies exist that I have never seen,
Nor any man-- I'll have the wanderlust.
Perhaps somewhere twin moons rise amber-red,
Their outlines quivering like reflections,
And cast a bloody light upon a world
Where grasseaters, thick-furred giants, are pursued
By packs of fleet, black, demon-visaged beasts.
Grasseater flocks roam all the rocky plain,
Worried by the slinking devil-things,
And yet they never seem to venture near
That silent city on a high far hill
Which, as if by the ruddy moons untouched,
Shines pearly white-- its outlines quivering.
Till I've been there I'll not be satisfied.

The Science of Blithering: editorial ravings & rantings

In doing my Music D homework assignments I have become acutely aware of the difficulty of reducing a Bach prelude to four-voice structure, or writing a chorale, while your roommate has the radio turned on & is listening to Guy Lombardo's rendition of Calypso Joe. It's bad enough writing music without a piano, without having to free your mind, by sheer will-power, of "Come with me my honey, my honey-bunny." Worse still, it isn't completely effective to retreat to the library's silence; because your roommate has had his radio tuned to the same Lombardo record so often that now, no matter how hard you concentrate on the written notes in front of you, some echo of its banalities is likely to intervene. This remarkable insistence of American entertainers-- & audiences-- on sticking to a single simple melody until everyone is so heartily sick of it that anguished screams are heard on dance floors when the first bar of its intro is played, leads in my case only to lousy harmony exercises. But I should think that in the case of someone who listened more exclusively to popular music than I do it might lead to a temporary bias of the musical mind.

I wouldn't be surprised if this was the explanation of the close similarities you frequently notice between popular songs. A few of the extreme examples I've noticed in the last year or so are the following: The opening phrase of You Made Me Love You has a very similar melody, the same rhythm, & the same words (as a phrase in Ma Rainey's See See Rider Blues). The opening phrase of Jersey Bounce was lifted intact for I Had the Craziest Dream (it also begins the old waltz, My Treasure). The entire middle section of Craziest Dream was adopted with a minor rhythmical change by the composer of a ditty called, I think, I've Had This Feeling Before; to continue the chain, the first phrase of the last song is identical with that of Making Believe. A theme used by Sibelius in the last movement of his Second Symphony has appeared in popular dress, not once (that would be pure coincidence, since as everyone knows the only classical composer Tin Pan Alley listens to is Tschalkowsky), but three times. Two of the songs are How Do I Know It's Real & Some Day I'll Meet You Again; I've forgotten the title of the third. These examples are numerous enough to show what I

mean. A few of them may be coincidental-- the first in particular-- but not all. & you've certainly observed many more. All this is entirely aside from understandable family resemblances between songs by the same composer, & the equally understandable attempts to cash in on past successes, as Cole Porter followed up some really good songs with such momentous miscarriages as I Love You & Frangipani.

So I guess it's really necessary for America's serious composers to use polytonality, twelve-tone scales, free counterpoint, tone clusters, etc. If they wrote straight their music would be full of ludicrous reminders of Guy Lombardo. Or, perhaps, of that haunting melody, Thanks to Teenamint I Feel Fine.

A good number of the technical advances made during the war have brightened the prospect of space travel: radar, automatic control devices, & improved powder rockets are the obvious examples. Just as promising are such automatic calculators as the new IBM machine here at Harvard, which solves differential equations by approximate integration. (Which however is not so very approximate: answers are to 23 decimal places. Or, you can solve three problems at once, each to 8 places.) Lack of this type of calculator might not have prevented space travel, but it would have stunted its growth something terrible. Even if the three-body problem were to be solved, ordinary human computation would have the greatest difficulty in coping with the very simplest case of an Earth-Moon rocket which forewent acceleration over most of its run. It's not a three-body problem, in the first place. To get anywhere near the accuracy you'd want-- say, to pick your landing spot within half a mile-- you'd have to consider in your calculations about seven bodies: ship, Earth, Moon, Sun, Venus, Mars, Jupiter. For the last three, you could probably ignore all but the largest few terms in the perturbation functions, but your headaches would still be considerable. Just calculating the Sun's perturbing effect on the Moon, using the first eleven terms of the perturbation function, is quite a job, & it leaves you with embarrassing errors of the order of a factor 0.1. The spaceship will have to do better than that or it'll miss Luna entirely.

Then there's another factor. Even if you do all your accelerating while close enough to your planet of departure or your destination so that perturbing effects are small, you have always the possibility that something will go wrong during this period. If your computers are merely human, & not electronic, you go slightly off course during take-off, you just have to sit down with pencil & paper & spend half your voyage figuring out what correction you should have made while you were still close to Earth: your deviation from the planned course was slight.

The IBM calculator is exactly suited to the type of job involved, in that you can set it to a particular problem & then shove in new constants at will, getting the solution for each set of constants in a matter of minutes. The only thing that takes time is switching it from one type of problem to another. So a machine set to give orbits from Earth to Luna will go on giving them, for any latitude & longitude, any time, & any type ship; which would be very convenient.

The question whether a calculator can be made small enough to be

carried on a ship is open to speculation. It wouldn't need 23 decimal places, & it probably wouldn't need to be able to run more than one problem at a time. But it would have to be fast for there to be any point to bringing it (if we assume the ship stays within ten light-minutes of Earth). & moreover it might be necessary for it to be capable of handling many types of equations. Probable first step: a small, fast job giving no more than 7 significant figures, used only in landing; all other problems to be radioed back to Earth.

Any more thoughts on this subject?

No doubt it's true that beings habitually using fractional light speeds would develop relativistic physics about as soon as Newtonian (though I bet they'd use the Newtonian for many purposes). But what would beings be like that developed high velocities before they developed civilization? First of all, they'd be very highly organized, not only because of the large size we assume they would have, but because of the modifications necessary in the senses of an organism of planetary origin before it can watch its companions Lorentz-contracting & not suffer a nervous breakdown.

Is this high organization consistent with lack of civilization? I think so, for two reasons. 1) During the period of escape into space selection would presumably be so severe that intelligence could not very well appear. 2) Immediately after conquering space, these very hypothetical beings would be presented with a much enlarged possible habitat, & the business of filling it would delay the appearance of a community-living species.

Then-- how would they locomote, what sort of metabolism would they have, how could they communicate at stellar distances, & how would an intelligent form, if not present, be evolved? Er-- excuse me, I gotta go now.

Recently high school students in an ultra-Republican Chicago suburb were asked whether 18-year-olds should vote. Result was 55% yes, 45% no. Boys in the older groups were far the most receptive toward the proposal; but the girl juniors & seniors were much less receptive than the girls in the lower classes, returning only 46% yes, 54% no. Interesting, I thought.

& that item pretty well exhausts both my space & my time, so for the nonce goodby.

-- Seedy

[Publisher's Note: - The blotch on p. 1 sez "Clinton '44"]
Seedy's score on the Ashley quiz wuz 88. Otherwise,
this paper is legible enough to be read by anyone who
really wants to. - nls]