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HEINLEIN

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"Yield to temptation. It may never pass your way again."

~Robert A. Heinlein

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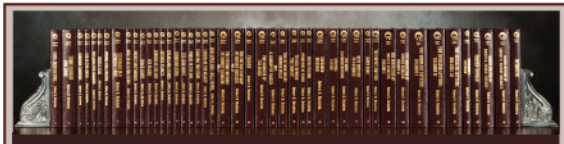

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The Virginia Edition

A SAMPLE OF THE SERIES

ROBERT A HEINLEIN

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CONTENTS

ABOUT THE SERIES

The Virginia Edition, Inc.
in association with
the Robert A. and Virginia Heinlein Prize Trust
and the Butler Library Foundation
is proud to present

THE VIRGINIA EDITION:
THE DEFINITIVE COLLECTION OF ROBERT A. HEINLEIN

The Virginia Edition represents authoritative texts for all of Robert Heinlein's published fiction and nonfiction, newly typeset, whenever possible from the editions put in final form by Heinlein's own hand. In other cases, the definitive texts are represented by editions restored to their intended state, in publications overseen directly by Virginia Heinlein after her husband's passing. Mrs. Heinlein's role in perpetuating her husband's work and legacy was at all times crucial, both during and after the writing. It is truly fitting that her name be remembered in close connection with his.

The published fiction and nonfiction has been selected and authenticated by scholars and authorities designated by the Prize Trust and the Heinleins' longtime agent, Eleanor Wood. Also included are 450,000 words of newly selected correspondence, most never before published, collected in three volumes. Each volume includes a frontispiece photograph of the Heinleins as well as an introduction by Dr. Robert James and William H. Patterson, Jr., Heinlein Scholar, detailing the circumstances under which each work was written. Manuscripts and correspondence were provided by the Robert A. Heinlein Archive of the University Library, Special Collections, University of California, Santa Cruz.

The Virginia Edition is a limited edition of 2,000 sets bound in leather and printed on 50-pound white acid-free and buffered paper that meets all U.S. archival standards.

THE COMPLETE HEINLEIN

Robert Heinlein was one of the preeminent writers of the last century. His work was among the first to address issues of technological change and its effect on society and individuals in a seriously literary and scientifically grounded way. This approach extended to all aspects of his work, particularly in novels targeted at younger readers. His refusal to talk down to children won him lifelong fans, darling status with the nation's librarians, and the effects were astronomical.

"Over the years, we've received an enormous amount of feedback from people who read Heinlein's stories and were inspired to pursue careers in science and space," said Art Dula, Trustee and Literary Executor of the Heinlein Estate. "This has been a regular phenomenon for the last fifty years. From early trailblazers like Buzz Aldrin and Jerry Pournelle to contemporary entrepreneurs like X-Prize founder Peter Diamandis and Falcon 9 creator Elon Musk, a tremendous number of people have pursued science and space careers because of their exposure to Heinlein. He talked about people doing extraordinary, 'preposterous' things in a way that felt realistic and achievable. That was one of his major contributions to the field. That was his gift."

Unlike many artists consigned to anonymity during their lifetimes, Heinlein's talents were quickly recognized by the public and he leapt from pulps to slicks to internationally bestselling author. His Future History series painted a vivid image of man thriving in space. Combined with a series of articles written after World War II, he illustrated the implications of nuclear power to a world unexpectedly thrust into the atomic age.

Three of his novels—*Starship Troopers, Stranger in a Strange Land,* and *The Moon is a Harsh Mistress*—illustrate core themes that occupied his attention and writing. Heinlein himself considered them three parts of a whole with each volume necessary to understand the other two.

Starship Troopers twisted convention by jumping to a time *after* the collapse of civilization, when the world had knit itself back together, using the altered world to explore core aspects of civics and duty. The popular reaction was intense and polarized, and the book has been core reading at the Naval Academy for many years.

Stranger in a Strange Land introduced the world to the Man from Mars, Valentine Michael Smith, in a no-holds-barred satire of politics and religion. Wildly popular, the book was taken up by the hippie movement of the sixties, some of whom passed dog-eared copies around college campuses and even founded a church based around the book—though perhaps missing some of the more satirical aspects of the story.

The Moon is a Harsh Mistress described an uprising by the descendants of a lunar penal colony, and their struggles for independence and self-rule. Packed with vividly realized characters, political theory, revolution, and its aftermath, even critics of the book were impressed by its complexity of theme and form, characterization and experimentation, and its willingness to stretch the boundaries of where genre was "allowed" to go.

"Heinlein's work has been so influential, so thoroughly aped and incorporated, that at times it fades into the woodwork and we forget just how groundbreaking it was and the extent to which it shaped the writing that followed. To that end, we believe that this collection serves two purposes," Dula continued. "First, it makes Mr. Heinlein's full catalog available in print as he wanted it. Second, through scholarly commentary, it gives *context* to that catalog and opens the way for scholars and fans to gain a richer understanding of what Heinlein was doing and why. This is a really unique collection and we are glad to see it made available like this."

In addition to collecting all of Heinlein's printed fiction, nonfiction, and screenwriting, the *Virginia Edition* contains three volumes of Heinlein's correspondence—including one volume dedicated entirely to his relationship with legendary editor John W. Campbell—and contextual notes and introduction by Heinlein scholars William H. Patterson, Jr., and Robert James, Ph.D.

The collection was named for Virginia Heinlein as recognition of the integral role she played in Robert's work. As wife, business manager, and caretaker, she shepherded him through illness and trumped death often enough that he was able to write seven additional novels. Virginia was also his collaborator. She vetted and expanded on story ideas, helped with research and calculations, and served as first reader and final judge of everything that left their home. Without her contribution, Heinlein's work would not have been as rich, nuanced, or prolific as it was.

Upon their deaths, the Heinlein's wills created the Robert A. and Virginia Heinlein Prize Trust (heinleinprize.com). Funded with the bulk of the Heinlein estate, the Trust honors their memory and dream of man's

future in space by encouraging and rewarding progress in commercial space activities. The Heinlein Prize is awarded no more than once a year to the private entity that has made the greatest contributions to commercial space.

In 2006, the first Heinlein Prize was awarded to Peter Diamandis for his work on the X-Prize and more than a dozen not-for-profit and for-profit space organizations. In 2011, the Heinlein Prize was awarded to Elon Musk of SpaceX for his work creating the Falcon series launch vehicles and the Dragon spacecraft. Appropriately enough, both of these grew up reading Heinlein and cited him as an early inspiration to pursue the future.

Their favorite Heinlein stories were *The Man Who Sold the Moon* and *The Moon is a Harsh Mistress,* respectively.

The Robert A. and Virginia Heinlein Prize Trust honors the memory of Robert A. Heinlein, a renowned American author. The purpose of the Heinlein Prize is to encourage and reward progress in commercial space activities that advance Robert and his wife Virginia's dream of humanity's future in space.

www.heinleinprize.com

THE VIRGINIA EDITION

RAY GUNS AND ROCKET SHIPS

(1952)

A LONG, LONG TIME AGO when I was much younger and the world was a quieter, pleasanter place, I discovered a field of fiction which delighted me. First it was the "Tom Swift" books and the "Motor Boys" books. After that I searched the shelves of the Kansas City Public Library, read all of Jules Verne starting at the left end of the shelf and working straight through, did the same with H.G. Wells, discovered that Kipling, Doyle, Poe, and many others had written at least a story or two in this field.

Presently I found that *Argosy-All Story* magazine and the *Electrical Experimenter* sometimes published stories in this field. The field did not have a name in those days, nor were there magazines devoted to it, nor did the general magazines publish it. I was just entering manhood when the first science fiction magazine was founded—Hugo Gernsback's *Amazing Stories*.

Gernsback had many imitators. Several dozen such magazines were founded during the two decades before World War II, and there are now being published [in 1952] about twenty American science-fiction magazines, plus many others in other countries. Since the end of World War II science fiction has broken out of the confines of specialist magazines and is now seen in every sort of general magazine, almost every major publishing house has its science-fiction list, and anthologies and limited editions are published by ten or a dozen specialty publishing houses.

Hollywood had produced a stream of feature pictures in the field; radio and television seem never to be free of the roar of rockets. Comic books and comic strips which are alleged to be "science fiction" are almost without number.

I am inclined to attribute this boom to general popularity largely to a change in public attitude brought about by a number of wonders revealed to us during and immediately after World War II—atom bombs, atomic power, radar, big rockets, germ warfare, "giant brains," robot weapons, television, and the like. Twenty years ago the notion of space travel was

First published in *Bulletin of the School Library Association of California* 24.1 (November 1952), pages 11–15 and 31.

fantastic nonsense to most people; today most people believe in the idea and expect that it will come true before long—indeed, they are aware from the newspapers that their own government is spending money on the preliminaries of space travel.

Regardless of cause, science fiction is now generally popular. Like *nouveaux riches* of other sorts it is striving for respectability without quite attaining it. The historical novel and the contemporary novel remain the accepted fields in which one may expect to find "literature"—whatever that may be. The past tense and the present tense are respectable, the future tense is still somewhat suspect; along with "actors and vagabonds," its place is still outside the walls of the city.

II

("When I make a word do a lot of work like that," said Humpty-Dumpty, "I always pay it extra.")

"Science Fiction" is a portmanteau term, and many and varied are the things that have been stuffed into it. Just as the term "historical fiction" includes in its broad scope *Quo Vadis*, nickel thrillers about the James Boys or Buffalo Bill, and *Forever Amber*, so does the tag "science fiction" apply both to *Alley Oop* and to Aldous Huxley's *After Many a Summer Dies the Swan*. It would be more nearly correctly descriptive to call the whole field "speculative fiction" and to limit the name "science fiction" to a subclass—in which case some of the other sub-classes would be: undisguised fantasy (Thorne Smith, the Oz books), pseudo-scientific fantasy (C.S. Lewis's fine novel *Out of the Silent Planet*, Buck Rogers, Bradbury's delightful Martian stories), sociological speculation (More's *Utopia*, Michael Arlen's *Man's Mortality*, H.G. Wells' *World Set Free*, Plato's *Republic*), adventure stories with exotic and even non-existent locale (Flash Gordon, Burroughs' Martian stories, the *Odyssey*, *Tom Sawyer Abroad*). Many other classes are possible and will occur to you, since the term "speculative fiction" may be defined negatively as being fiction about things that have not happened.

One can see that the name "science fiction" is too Procrustean a bed, too tight a corset, to fit the whole field comfortably. Nevertheless, since language is how we talk not how we might talk, it seems likely that the

term "science fiction" will continue to be applied to the whole field; we are stuck with it, as the American aborigines are stuck with the preposterous name "Indian."

But what, under rational definition, is "science" fiction? There is an easy touchstone; science fiction is speculative fiction in which the author takes as his first postulate the real world as we know it, including all established facts and natural laws. The result can be extremely fantastic in content, but it is not fantasy; it is legitimate—and often very tightly reasoned—speculation about the possibilities of the real world. This category excludes the Land of Oz; it also excludes rocket ships that make U-turns, serpent men of Neptune that lust after human maidens, and stories by authors who flunked their Boy Scout merit badge tests in descriptive astronomy.

But the category includes such mind-stretchers as Olaf Stapledon's *Last and First Men*, William Sloane's *To Walk the Night*, Dr. Asimov's *The Stars, Like Dust*—even though these stories are stranger than most outright fantasies.

But how is one to distinguish between legitimate science fiction and ridiculous junk? Place of original publication is no guide: some of the best have appeared in half-cent-a-word pulp magazines, those with the bug-eyed monsters on their covers; some of the silliest have appeared in high-pay slicks or in the "prestige" quality group.

"The Pretzel Men of Pthark"—that one we can skip over; the contents are probably like the title. Almost as easy to spot is the Graustark school of space opera—this is the one in which the dashing Nordic hero comes to the aid of the rightful Martian princess and kicks out the villainous usurper through superscience and sheer grit. It is not being written very often these days, although it still achieves book publication occasionally, sometimes with old and respectable trade book houses. But it does not take a Ph.D. in physics to recognize it for what it is.

But do not be too quick to apply as tests to science fiction what are merely the conventions of better known fields of literature. I once heard a librarian say that she could not stand the unpronounceable names given by science-fiction writers to extraterrestrials. Have a heart, friend! These strings of consonants are honest attempts to give unearthly names to unearthly creatures. As Shaw pointed out, the customs of our tribe are not laws of nature. You would not expect a Martian to be named "Smith." (Say—how about a story about a Martian named "Smith?" Ought to make a good short. Hmmm—)

But are there reliable criteria by which science fiction can be judged by one who is not well acquainted with the field? In my opinion, there are. Simply the criteria which apply to all fields of fiction—no more, no less.

First of all, an item of science fiction should be a story, i.e., its entertainment value should be as high as that which you expect from other types of stories. It should be entertaining to almost anyone, whether he habitually reads the stuff of not. Secondly, the degree of literacy should be as high as that expected in other fields. I will not labor this point, since we are simply applying an old rule to a new field, but there is no more excuse here than elsewhere for split infinitives, dangling participles, and similar untidiness—nor for obscurity and double-talk.

The same may be said for plotting, characterization, motivation, and the rest. If a science-fiction writer can't "write," let him go back to being a fry cook or whatever it was he was doing before he gave up honest work.

I want to make mention of the author's evaluations. Granted that not all stories need be morally edifying, nevertheless I would demand of science-fiction writers as much exercise of moral sense as I would or other writers. I have in mind one immensely popular series which does not hold my own interest very well because the protagonist seems to be guided only by expediency. Neither the writer nor his puppet seems to be aware of good and evil. For my taste this is a defect in any story, nor is the defect mitigated by the wonderful and gaudy trappings of science fiction. In my opinion, such abstractions as honor, loyalty, fortitude, self sacrifice, bravery, honesty, and integrity will be as important in the far reaches of the Galaxy as they are in Iowa or Korea. I believe that you are entitled to apply your own evaluating standards to science fiction quite as rigorously as you apply them in other fiction.

The criteria outlined above take care of every aspect of science fiction but one—the "science" part. But even here no new criterion is needed. Suppose you were called on to purchase or to refuse to purchase a novel about a Mexican boy growing up on a Mexican cattle ranch; suppose that you knew no Spanish, had never been to Mexico and were unacquainted with its history and customs, and that you were unsure of the competence of the author? What would you do?

I suspect that you would farm out the decision to someone who was competent to judge the authenticity of the work. It might be a high school Spanish teacher, it might be a friend or neighbor who was well acquainted with our neighboring culture, it might be the local Mexican consul. If the

expert told you that the background material of the book was nonsense, you would not give the book shelf room.

The same procedure applies to science fiction. No one can be expected to be expert in everything. If you yourself do not happen to know what makes a rocket go when there is no air to push against, you need not necessarily read Willy Ley's *Rockets, Missiles, and Space Travel*—although it is a fine book, a "must" for every library, desirable for any home. You may instead consult anyone of your acquaintance who does know about rocket ships—say an Air Force or Artillery officer, a physics teacher, or almost any fourteen-year-old boy, especially ones who are active in high school science clubs. If the novel being judged concerns cybernetics, nuclear physics, genetics, chemistry, relativity, or whatever, it is necessary only to enlist the appropriate helper.

You would do the same, would you not, with a novel based on the life of Simon Bolivar?

Of course, there is the alternate, equivalent method of testing the authenticity of any book by checking up on the author. If the Simon Bolivar novel was written by a distinguished scholar of South American history, you need concern yourself only with the literary merit of the book. If a book about space travel is written by a world-famous astronomer (as in the case of the one who writes under the pen name of "Phillip Latham" [i.e., Robert S. Richardson]), you can put your mind at rest about the correctness of the science therein. In many cases science-fiction writers have more than adequate professional background in the sciences they use as background material and their publishers are careful to let you know this through catalog and dustjacket blurb. I happen to be personally aware of and can vouch for the scientific training of Sprague de Camp, George O. Smith, "John Taine," John W. Campbell, Jr., "Philip Latham," Will Jenkins, Jack Williamson, Isaac Asimov, Arthur C. Clarke, E.E. Smith, Philip Wylie, Olaf Stapledon, H.G. Wells, Damon Knight, Harry Stine, and "J.J. Coupling"—this listing refers to qualifications in science only and is necessarily incomplete, nor do I mean to slight the many fine writers without formal scientific training who are well-read in science and most careful in their research.

But some means of checking on a writer of alleged science fiction is desirable. Most writers of historical fiction appear to go to quite a lot of trouble to get the facts of their historical scenes correct, but some people seem to feel that all that is necessary to write science fiction is an unashamed imagination and a sprinkling of words like "ray gun," "rocket tube," "mutant," and "space

warp." In some cases the offense is as blatant as it would be in the case of an author of alleged historical fiction who founded a book on the premise that Simon Bolivar was a Chinese Monk! It follows that, in order to spot these literary fakers, it is necessary to know that Bolivar was not a Chinese Monk—know something of the sciences yourself or enlist competent advisers.

III

It was suggested that I comment on the writing of science fiction for children. I am not sure just how to do this as I am not sure that I have written any science fiction for children. It is true that I have a group of books which are catalogued as being intended for "boys of ten and older"—but I have found that this list is read by adults as well as by boys (and girls!) and that my books intended for adults are read by my younger readers as well as by adults. Science fiction is quite ambivalent in this respect. A book so juvenile that it will insult the intelligence of adults is quite likely to insult the intelligence of the kids.

When I was a child myself I used to get quite annoyed at authors who "wrote down." When I was first asked to do a book intended for kids I swore a solemn oath that I would never "write down"—it is better by far that a child should fail to grasp some portion of a story than it is to patronize him. So I believe and my experience seems to bear me out. In my own work I make just two minor distinctions between copy intended nominally for adults and copy intended nominally for not-yet-adults. In the boys' list I place a little less emphasis on boy-meets-girl and a little more emphasis on unadulterated science—but these are matters of slight emphasis only. On the first point I am obeying a taboo set up by adults, it being my own recollection that kids get interested in boy-meets-girl at a very tender age. On my second point it is my recollection and my more recent observation that kids are more interested in "how" and "why" than their parents usually are. The kids really want to know how the spaceship operates; the adults frequently don't care—so I try to give the kids enough detail in matters technological to satisfy them without giving so much that it will bore an adult. In any case a science fiction story should be a story first of all; it is not intended to replace science text books.

But most especially in writing for kids the science in it should be valid. When they spot an error they are not likely to forgive it.

In many ways science fiction belongs to the kids. They know that "it hasn't happened yet"—but they believe that it will happen. They expect to grow up to build space ships, to pilot them. They still believe in change and they are undismayed by the wonderful and terrifying future we have in front of us. If an adult enjoys science fiction, it is almost a guarantee that he has managed to carry over a youthful point of view, a mind not yet calcified, a belief in change and the future. It is for the youngster and for this adult who still has something of youth about him that we write.

NOTES

In the early 1950s, Heinlein's name recognition for the American general public soared after the success of *Destination Moon*. Alice Dalgliesh, Heinlein's juvenile editor at Scribner's, thought that the bulk of their sales went to libraries. That was probably true for the rest of the Scribner's children's line, but it was not true of Heinlein's sales.

Nevertheless, Miss Dalgliesh encouraged Heinlein to write articles for book trade magazines, speak liberally to librarians' associations, and write articles for their journals. Thus, Heinlein became librarians' expert on how to recognize and buy good science fiction—a subject of great interest to librarians who did not want to get caught in the culture wars shaping up over violence in comic books and related fields. "Ray Guns and Rocket Ships" was written for the *Bulletin of the School Library Association of California.*

By 1952 Heinlein had done several of these articles, but Miss Dalgliesh was so pleased and impressed with "Ray Guns and Rocket Ships" that she asked to be allowed to submit it to *Library Journal*, with its larger circulation, so it could get a wider distribution.

The article was edited (presumably by the *Library Journal* editors, as there is no condensed manuscript in Heinlein's files), omitting the first thousand words. It is this cut version that Heinlein reprinted in *Expanded Universe*, following his usual practice of presenting the "most familiar" version of a work, rather than the original version. Consequently, the Virginia Edition presents the first republication of this, the original version of "Ray Guns and Rocket Ships"—which was also the first public mention of a Martian named Smith. . . .


S-H 4949 No.54-03
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Ginny Heinlein is blowing out the candles of her "Over-the-Hill," thirty-fifth birthday cake as Robert Heinlein and neighbors (Norm Satow in foreground) look on. Permission the Robert A. and Virginia Heinlein Prize Trust.

LETTER TO LARRY NIVEN & JERRY POURNELLE ABOUT THE MOTE IN GOD'S EYE

June 20, 1973 To Larry Niven and Jerry Pournelle

Dear Jerry and Larry,

Subj: MOTELIGHT

This must be fast and sloppy, time presses. FYI I have spent three long days on this, postponing professional work of my own—because I like and respect both of you. So please respect my effort even when you dislike or disagree with my comments.

SUMMARY

1. This is a very important novel, possibly the best contact-with-aliens story ever written.

2. It has a major fault and a very large number of trivial faults. Both the major fault and the endless trivial ones can be corrected.

I would like to give it a strong and unadulterated puff. I cannot do so in its present form. If it were my story I would withdraw it at once, to make certain changes, then send it out again—for this could be and should be a real winner, a landmark story.

But it is not my story, so I must elaborate what I see—then withdraw. People seldom take advice—and this advice you did not ask me to give. I shan't be offended if you don't take it; I hope that you will not be offended that I proffer it. So—

Preliminary: the title MOTELIGHT. Gentlemen, a MOTELIGHT is a light in front of a motel which reads VACANCY or NO VACANCY. This is sad, but that is what it signalled to me and (I think) what it will signify to most people. You could beat this by splitting it into MOTE LIGHT—but you still would not have a good title to attract readers. What is a good title? I don't know. Finding a catchy title is one of the hardest aspects of fiction for me; I do not always succeed. Sed exempli gratia: In 1939 [marginal correction by VH: 1940] I sent JWC a story ROADTOWN; he published it exactly as written but changed the title to THE ROADS MUST ROLL—(tired—can hardly type—sorry.) His reasons: "Roadtown"

doesn't say anything; it just lies there. But "The Roads Must Roll" suggests action, an urgent necessity, and an unexplained mystery . . . for roads do not roll! What is this? Let's take a look and find out. (Paraphrase from a memory 34 years back, but close to his words.)

I offer you JWC's theory about titles because I do not have a better one of my own. But I suggest that his touchstone is valid: A title should not just lie there; it should goose the potential customer in some way—intrigue or annoy him or something, enough that he picks up the book and reads the first paragraph of the blurb. But don't let his eye move on past your opus merely because the title is dull.

Now as to the MAJOR FAULT—

This is a swell yarn and I do not suggest changing the story line in any respect, nor any revisions of any sort—but I think it imperatively requires judicious cutting. Once you have intrigued him with the title, you must hook him at once, hang onto him, and never let him go. Gentlemen, I am truly sorry to have to say that this story failed to hook me and hang onto me . . . until page 100! Had it been a stranger's MS or book, I would never have finished it (to my own great loss; it is a great story).

We are in a highly competitive market, battling each year against not only thousands of other new novels but also TV and a myriad other things. In the XIXth century Captain Mayne Reid could use a whole opening chapter merely to describe the prairie—no dialogue, no action, no characters—in his very exciting and successful SCALP HUNTERS—but in the late XXth century one simply cannot use up to 30,000 words before getting down to business with the main story line. Allah the Merciful!—the hero doesn't appear until page 32, the heroine not until page 44—and the story doesn't start until the top of page 100.

Let me stipulate that you can find similar faults in other stories including my own. And that those first 100 pp are loaded with information, much or even most of it necessary foundation for understanding the story. Nevertheless your customer doesn't give a hoot about fictional future history nor about popular science per se; he is paying to be entertained. But what have you given him? An astronomical oddity in the midst of a war—a war that never engages his emotions, and the oddity affects him even less. Please remember that most readers won't realize why coherent light excites these astronomers . . . because most of them don't know what it is and therefore won't understand what the excitement is about. It's a "So what?"

As are also the characters on stage, and the war itself. The characters are

killed off (no tears as we never really knew them) and the war is lost (won—the reader doesn't care which)—then nothing happens for a century or so.

Then we jump right into a space battle. Pretty good battle, as space battles go—save that Doc Smith almost exhausted the theme circa 40 yrs back. We SF writers can do almost anything we wish in a space battle, simply by laying it far enough in the future and picking the particular Marvelous Inventions (or lack thereof) to rig the game. To make the battle (fictionally) worthwhile, it is necessary to engage the reader's emotions . . . which is done quite well this time—then the Good Guys lose and the Bad Guys win—whereupon Colvin (who looked like Our Hero for a few pages) disappears until the end of the book and plays no important part even then.

A midshipman comes aboard to accept capitulation, carrying a bomb as a "deadman" weapon. Ah, fine! Our Hero, at last! But it turns out that he is not Our Hero; he is not even allowed to be prizemaster after he has taken the risk, above and beyond etc. (Don't tell me a midshipman can't be a prizemaster; Farragut was, as a midshipman at the age of twelve—look it up. He subdued an attempt by the surrendered skipper to take the ship back, too, and sailed his prize into port. Jerry-Larry, I find a note of false empathy in not permitting the midshipman to remain as prizemaster; he had paid for it, and the job does not require senior rank, it requires guts. But this is minor and may not jar many readers.)

So at last we meet Our Hero (p. 32), then we fandance to page 63, where it does turn out that he has heroically led an infantry action on the ground (but offstage; our emotions are never involved in it)—having abandoned his new command to do so. Jerry, I found this one awfully hard to swallow. I still do. Lord and heir to Crucis he may be . . . but he was a commanding officer of a ship underway in hostile space in wartime. He should have been stripped of his command and sent back home under hack to face a GCM. We are offered the excuse that he thought the major of Marines to be incompetent, so he had to do it. It won't wash. Who is he, a naval line officer 25 yrs old, to decide that he can do a Marine major's job on the ground better than the major can? Incredible conceit! I can't swallow it at all. He rates a second GCM for displacing the major on the ground.

This double-offense incident must be made convincing or it should come out entirely. It isn't necessary to the story and it makes Blaine an utter jerk.

(And a jerk he is—let's skip to p. 444 for a moment. His admiral orders him to leave his dying ship ahead of live members of his ship's company, and—by Lord Nelson's blind eye at Copenhagen!!!—he accepts the order.

(Gentlemen, he can't! A captain of a ship can never have less than total responsibility and authority over his ship. If a captain disagrees with an admiral's order—even if it's the flagship—he makes his own decision, and accepts the consequences . . . even if it means that he is cashiered later or merely milled. But this one order in particular he cannot accept.

(Yes, I know you have to save Blaine's life to finish out this story. If you must, have him buck the admiral on this, then save him somehow, even by the crudest deus ex machina. But our hero must be a hero at least at this point. Save him, surely, but not this way. He's been a jerk twice before, in the crunch: this one is far worse than the other two put together.

(It's a fine time for "Nelson's Blind Eye"—and in being a hero he just might learn some new datum—an important one, about the Moties. That could salvage the scene, in re plot.)

Back to the first hundred pages—

How to correct the major fault, I don't know; it's your story. But cutting the bejasus out of those 100 pp would help. It is all featherdusting, not story, and you need to determine just what supporting data must be saved to keep the plot intact—then see how much of it can be tucked away into corners after page 100—and what is left must be told in such a way as to grab the reader and pull him along, not lose him. Me, I would start the story about page 62, make the hearing before the admiral much nastier and nasty much longer:

> "Pipe down, young man; I'm not through with you yet. Yes, I know you are Lord Blaine, heir apparent to the throne of Crucis—but that's not why I'm letting you get away with this. I'm doing it for your old man, not you. You may or may not know that, long years back, we were JO's together and shared the same gun room—but you don't know, I feel certain, that I would not be alive today if your father hadn't risked his neck for me one dark night on Sigrid.
>
> "So I'm not doing it for you; I'm doing it for Stinky Blaine who was as fine a shipmate and friend as a man ever had—and as smart an officer, before the poor bastard had to go back and assume your hereditary responsibilities. So it's not for you. I don't even like you—but I owe old Stinky one.
>
> But— Mark my words! You'll keep your ship and a brevet fourth stripe and I'll start the red tape to make it permanent . . . but

> just one more goof like the two you've pulled, and I'll not only have that fourth stripe but the other three as well. And your sword! By God, sir, if you were His Imperial Highness, heir apparent to the Empire itself, I'd have your sword and see you drummed out of the Fleet! Understand me?"
>
> "Yes, sir."
>
> "Carry out your orders, Captain Blaine. Dismissed."
>
> "Aye aye, sir!" Roderick Lord Blaine did a smart about-face and left abruptly. His arm hurt him as he moved but he did not notice it.

Do something like that and you'll have a hero the readers can empathize with. He's under a very dark cloud—secret, only the admiral and his former skipper know it . . . but Blaine knows it—and it is eating at his guts until he redeems himself—probably about page 444.

Next day—ambient temperature 90 and rising; it bids fair to beat yesterday's 102—if you don't like what I have to say today, you can blame it on the heat.

All that I suggest doing to the last half is a) cut as many words as possible, and b) search for places to insert essential featherdusting from pp 1–100, using any device appropriate—including dialogue, in narration, or as flashback.

Both are tedious carpentry, neither is revision. Don't change the story line at all—save that I hope that you will do something about p. 444. I suggest cutting with a ¼" feltpoint (which I use because it blots out completely and leaves no temptation to put it back in later—I use up 4 or 5 on every book MS)—use a feltpoint and cut to the bone . . . adjectives, adverbs, phrases, subordinate clauses, whole sentences, and sometimes paragraphs, anything that does not move the story line. Then do the whole tedious job over again. And again. And pass it back and forth between you to sweat out the last ounce of fat before you reach the starting gate . . . without eliminating any of the bone and lean.

Look, friends, pp. 100–799 read just fine as they are . . . but you are in a tough market with very high production costs. This MS is so long that the trade book would have to price at $9.95, which scares the publisher, and holds down sales even if he takes the risk. I don't want to see that; I want this book to be a bestseller. By careful cutting you can knock two dollars off that list price—while improving the pace of the story greatly. Perhaps knock off still another buck if

you work closely with your publisher to hold down overhead—carefully prepared, very clean copy, suitable for computer typesetting and in conformance with his house style book, extreme care on the proofs and no revisions at all even though the contract permits you limited revisions in proofing. (Re house style book—my publisher uses Skillin and Gay's WORDS INTO TYPE and I follow it carefully . . . save where I disagree with it, whereupon I say why I disagree and mark the exception "stet." This gives the copy editor almost nothing to do and holds down the office overhead—and that overhead shows up in the list price multiplied by a factor of five. So find out about the house styling and go along with it except where you have specific story reason not to—and in such cases, say why. If you don't do this, some 23-year-old copy editor is going to make hen tracks all over the pages and you won't like it, and endless time and money will be wasted in unnecessary friction and up goes the list price along with your blood pressure.)

All the above is merely tedious work; swallowing those first 100 pp calls for all your technical skill. You'll do it your way, of course (if you do it at all—it's your story). But I've been lying awake, thinking about how.

I think a chronology at the very beginning would help a lot—it might enable you to scrap 50–60 pp.

1969 Neil Armstrong sets foot on Earth's Moon.
2008 First interstellar . . . . . (whatever)
2488 Coronation of Pedro I at New Rome, Homestead
???? Consolidation of First Empire
???? Jasper Murcheson explores Coal Sack region
???? Something or other (collapse of First Empire?)
2692 Second Empire, Coronation of Beastly IX
2783 Spurious nova in Coal Sack—Coherent Light
2791 Founding of Church of Him
2891 Defiant vs. MacArthur, reconquest of New Chicago
2892 First Contact

Stop with "First Contact" and don't elaborate, don't even say "First Contact with Aliens." That is where your real story starts, so don't tip anything. All you are doing is putting your reader into the story, so give him the essential dates and events in the background that carry him from now into then. Clearly you have a very detailed history in mind—and that is good—but you give the reader more than he wants or needs to know. Give him only what he must know to understand. E.g., for THE ROADS MUST ROLL I did a lot of desk engineering, with sketches, specs for

the materials for the moving belts, power requirements, how to load and unload cargo flats without stopping the roads, etc. None of this appears in the story—but at every point inside the story I knew where I was and what I was doing and why—but the reader did not need to know; the realism came through because *I* knew.

Now you two know your fictional history of the next millennium. Fine! The reality of what you are saying comes through with every line. But you haven't yet learned what to leave out—and you tire your reader with more than he wants to know about penguins. A bare-bones chronology would keep him straight—and this story is so complex it needs it; I kept wishing for one even with that 100 pages of featherdusting, because I was forced to keep thumbing back through that bulky MS to clear up some point that depended on dates.

Just as obviously you know all about your aliens (best aliens I've ever encountered, truly alien but believable and one could empathize with them, every ecological niche filled, total ecology convincing, etc.—grand). But you let us learn about them in tasty tidbits, instead of one giant, soggy 100 pp. mass.

The chronology should not be more than one page in the bound book.

A dramatis personae might help as you have several dozen named characters plus hundreds of spear carriers, some of them with names. I suggest you list a baker's dozen of human characters, no aliens, and list the hero and heroine first:

Commander Roderick Blaine, Imperial Navy
Sally Fowler, B.A., M.S., doctoral candidate in anthropology
Fleet Admiral Sonabitch, Commanding cis-Coal-Sack Imperial Forces
Admiral Sundowner, Commander Special Task Force
Senator Fowler, Majority Leader and Member Imperial Privy Council
His Imperial Highness Prince XXXXXXX, Viceroy for New Caledonia
Hugh Renner, Sailing Master Lieut. Cmdr Imperial Reserve
Father David Hardy, Chaplain Commander Imperial Reserve
Horst Staley, Passed Midshipman Imperial Navy
Peter Colvin, Comrade Commander Defence Forces of Union, skipper of UFRS Defiant
Tom Gerry, Comrade Monitor assigned to Defiant
Bill Tunbridge, Committee of Public Safety, Union Free Republic

* * *

I haven't tried to remember correct names and titles, nor to pick out the indispensables. Pick out the ones essential to the plot, keep it short, don't try to tell too much about them in listing, just flag them unmistakably. Let Rod Blaine's titles and political importance wait to show up in the story. (It wouldn't hurt anything if he had had an older brother, died or maybe killed in these wars. Rod was the second son, the "Naval Prince," and never expected to have to assume the onerous chore of governing. This could contribute to his gloom while he's under a cloud. He loves the Navy and hoped someday to be a Fleet Admiral, perhaps even a Grand Admiral-in-Chief—and he's not only lost his idolized older brother but knows that he now must give up his career, get married to somebody—probably arranged, a gal with buck teeth and halitosis but the right political lineage to support the Emperor—and breed an heir . . . but worst of all, he feels a deep sense of loss of personal honor from having goofed like a goddam snotty in his first combat command and thereby has lost the respect of his seniors. Surely, it's a secret; the only two who know the straight of it will keep their lips zipped forever not to hurt Rod's father and/or the Empire. But Rod knows it . . . and to an inner-directed man, ruled by conscience and a sense of duty, this is what hurts. He would much rather face a GCM, accept being busted back to 2½ stripes, then work to redeem himself. Instead he's being given a promotion he knows he hasn't earned, and required to keep silent.

(Perhaps he asks for his court—I think I would—and is told flatly and roughly that he can't have it. Since no charges have been preferred, he can't demand it, no legal way to. Instead he is told to shut up and soldier, don't ever discuss the incident with anyone. "Young man, I will decide what is best for the Empire at this point. Not you."

(I recall an incident when a buddy of mine, now deceased, my age and with two stars, was commanding a carrier division task force . . . and was called on the carpet by the admiral over him. Andy [Ahroon] said to me that it was the roughest session he had had since he was a plebe, much worse than combat. I recall some of the dialogue, as Andy related it to me: "Zilch, I sat on your selection board for admiral—and voted for you—and now I think I my have made a mistake." Later—"Stand where you are!—I'm not through with you yet," etc. Andy was rear admiral, permanent grade, with loads of combat and decorations for valor . . . yet he was required to stand at attention and keep quiet, while his boss—in private, of course, browned him on both sides. Friends, Rod Blaine is treated entirely too gently by his

bosses; this is not the mark of a high-morale fighting force. True, they have cogent reasons to let him get away with it—this time. But they should, and would, let him know how serious it is and ream him out unmercifully, and tell him that next time they'll throw the book at him.)

A young man sometimes is allowed to get away with a major offence—once. Some forty-odd years ago a classmate of mine told a lie in answer to an official question. The admiral decided that he could be salvaged, so, instead of requiring him to resign or face a court that would cashier him, the admiral punished him very severely—but privately. (I learned of it by accident.) My classmate retired about ten years ago with three stars, plus a tombstone bump to four stars—with a truly heroic war record and long years of flag command.

And speaking of Naval princes—Lieut. Windsor (later George VI) was a turret officer in a British battlewagon that paid a call to San Diego. This was prohibition and a bunch of the younger limey officers lit out for Agua Caliente. Lieut. Windsor knew damn well that he should not go—a royal prince crossing into Mexico without letting the Mexican government know it—Jerry, you will understand the protocol matters involved even better than I do. But he went . . . and when he returned, his skipper required him to deliver up his sword and slapped him in hack for the rest of the cruise. Publicly, too—no attempt to save face. Duke and prince and second in line to the throne—no matter. To that 4-striper he was Mr. Windsor, a division officer who had goofed and must pay for it.

I was utterly delighted with the ending. For me, the tension grew greater and greater as the story moved along . . . and as I got very close to the ending I thought: Good God, how are they going to get themselves out of this?—they've painted themselves into a corner. Resort to a "Hollywood Happy Hurdle"? Oh, no!—I hope not. It's too good a story for that sort of shabby nonsense.

And you didn't, you didn't! No "Happy Hurdle" but an utterly logical ending, totally satisfying to me. It demonstrated that Politics is the Art of the Possible, that no monarch is so absolute that he can resort to a solution his subjects won't accept, that there is no such thing as a "final answer," that we humans live through finding make-do solutions to buy time—and that we can console ourselves with the hope that, just possibly, the horse might learn to sing. Grand!

Congratulations, gentlemen.

* * *

I've been thinking about title, with no shining success. THE EYE OF GOD, THE HORSE MUST SING, A BOTTLE OF DJINN—No good? Well perhaps they will stir your imaginations. Try searching in the Old Testament, especially Ecclesiastes, Psalms, Proverbs, Job, and the Song of Songs Which Is Solomon's. For a shortcut try the jumbo edition of Bartlett's under "Old Testament." I mean the King James version of course, for beauty of phrasing.

The rest of this will be unpleasant but the criticisms are all of minutiae; do please hold down your choler:

Gentlemen, this MS needs a shave and a haircut and its shoes aren't shined; it is not ready for inspection. it is loaded with errors in grammar, in spelling, in punctuation, even some in usage. It will (unnecessarily) annoy and put off any editor who has a thorough grounding in the English language—and quite a few of them do have despite the dreck one sees in print today.

I predict that it will annoy Lurton too, on these points. Some 25-odd years back [1947–48] I saw a letter to another client of his (shown to me by the client, not by L.B.) in which he told her [Vida Jameson?] quite bluntly that his time was too crowded to spend it correcting her punctuation and spelling.

A carpenter must have sharp tools; a professional writer should keep his tools sharp.

Don't handicap yourself this way! If you can't spell, resort endlessly to a good dictionary. (I don't spell very well but I'm learning. Praise Allah, Ginny does spell well. I study—I have never stopped studying grammar and usage and punctuation.) Lay hands on a good secretary's handbook, then wear it out. Compare Fowler with Follet, and both with Skillin and Gay. There is no easy way—or I've never found one—but out of four of you there must be one who is better at this than the other three; he (she, more likely) might take on the chore of copy-editing this MS. But that does not get the two males off the hook; you must study and never stop. Try reading Fowler as if it were a novel—it's not dull, it's fascinating. We are heir to the largest, most complex, and most difficult language humans have ever used; a study of its endless nuances quickly becomes a happy compulsion. Enjoy it! And for dessert, read Rosten's The Joys of Yiddish; another language always throws new light on one's own mother tongue.

MINOR FAULTS and other minutiae:

"Weird," "Seize," and "Yeoman" are misspelled throughout. The

diphthongs "ie" and "ei" are confused erratically. Many polysyllabic words are misspelled. "Who" and "Whom" are confused in many places but especially where the construction calls for the dative but the governing preposition (in, to, for) happens to be separated from its object. The reverse of this error appears often with "than" especially when the verb of the subordinate clause is implied but not stated—usually some form of the verb "to be." E.g., "He's older than me." Wrong, of course, and grossly obvious in so simple a sentence. Correct: "He's older than I (am)." Quite all right to leave the second clause virtual—but that does not change the case of its subject.

Errors in grammar unacceptable in narration are of course acceptable in quoted dialogue . . . but I suggest that the aristocracy, officers, clergymen, and scientists will all speak more nearly correctly than those who have not undergone as much formal schooling. Sailing Master Renner, or a mustang officer, might be less schooled, and ratings (except yeomen) might be quite ungrammatical. Even the clergyman-semanticist would use casual colloquialisms, virtual sentences, and unfinished sentences in casual conversation. But a character who is expected to be highly schooled. Revision: But a character whom one expects to be highly schooled as implied by his status in that society should speak, simply through years of habit, in nearly correct English at all times—usage and construction that reflect years of stern schoolmasters in his background. He is not being stilted nor putting on a show; that is simply how he talks, through habit, through schooling, through hearing his elders and mentors talk that way in his childhood. Sally Fowler might swear like a trooper . . . but she would use the subjunctive correctly through habit and would never (rarely) confuse the nominative and the accusative. Oh, she might call out: "It's me, darling!"—but she would not say "it is him"—it would require effort for her to do so; she would have to stop and intentionally reprogram her own canalized speech habits. She means to become a respected scientist; she will not affect vulgar speech just to show off.

(We all know, and so does the reader, that the vocabulary and usage of the XXIXth century will not be that of today. But you have elected to assume that this is told in "translation" to our own modern speech and idioms ((and many of our customs)). This is within the limits of accepted conventions for fiction; it does not break empathy. But having laid down the rules you are bound by them.)

P. 35, line 9: One does not send "respects" to an officer junior to oneself; one sends "compliments." "Twenty men—and my compliments to

Lieutenant Mattridge and will he please join us." That is a direct order formally phrased. (Under extreme pressure it might transmute to: "Joe, tell Matt to haul ass here fast!" But not necessarily—depends on personality. E.J. King was formal even under pressure . . . but he had a most colorful command of profanity. General Gay, Patton's C of S, was informal but polite.)

P. 66 and 77 et al.: "Aye aye, sir" is never used as simple affirmative; it is a technical idiom semantically equal to "Roger, Wilco"—"I understand your order and will carry it out."

P. 35 et al.: A Marine gunner as a steward? This tends to break empathy. I suggest changing "steward" to "personal orderly" or sometimes just "orderly" throughout—then they can still do dogrobber jobs but with dignity. Do you want a bunch of tough USMC veterans on your necks?

P. 85, line 10—since you have followed British naval customs quite closely throughout, please be advised that, since the time of George III, British Naval officers toast their monarch sitting down. When George III was a young naval officer he once cracked his skull on a low overhead during such a toast; when he became king he ordered naval messes to remain seated in toasting him. The order still stands. But why not strike any reference to standing or sitting? It is surplusage.

P. 86, last line: Even a 25-yr-old CDR, especially one with Blaine's background, should know that a skipper ends a formal dinner simply by standing up—then offers his arm to the lady present in this case.

P. 107, last line: Since you spell out "coxswain" elsewhere, why do you use the vulgar spelling of "boatswain"? "Bosun" is not the accepted naval spelling even though it is given as a variant in some dictionaries.

P. 129, line 12: One is "in" a naval vessel, not "on" it. This naval idiom may seem odd today but it is simply logical for a spaceship.

Here and there: Why capitalize "Sailing Master" but not "the captain"? Better pick either high style or low style and then be consistent with it, or you'll have some copy editor mucking up your MS.

Here and there: It bothers me to hear Sally call Captain Blaine "Rod" when anyone else is present. It is intentionally rude and she knows it and that doesn't fit her characterization. Even a boatswain when he is a skipper is addressed by everyone at all times as "Captain." An admiral would do so most meticulously, so would a king—and each would ask his permission before going on the bridge or would wait to be invited. (I won't even call my eldest brother by his first name if any but family are present; I call him "General" and refer to him as "the General.")

Damn it, gentlemen, the skipper of a ship is senior to everyone aboard no matter what his rank—even if it's the flagship and the flag officer is aboard. He is a monarch, and nobody outranks him, ever. One skipper (Captain Hines) once ordered his own flag officer (Admiral Nulton) to get off the bridge and stay off, and to confine himself to the flag bridge and admiral's country, not to go anywhere else in that ship—and made it stick. An admiral does not give orders to a skipper under his command; he gives them to the ship, by signal or other formal channels—but not to the skipper as a person.

This is why page 444 is so bloody awful . . . and why it gives you a wonderful chance to let Rod redeem himself by refusing an unlawful order. The only lawful way that admiral could require Rod to leave that ship other than the last would be to relieve him of his command, then request the new skipper to arrest Rod and deliver him forthwith to flag. But I doubt that either officer would accept such a round-about way of encroaching on a skipper's rights and duties.

(In private Sally can call Blaine "Rod" all she wishes. That is just le tutoyer of boy-meets-girl.)

Throughout: Don't use contractions such as "don't" other than in quoted dialogue; such usage is not acceptable in formal English. It is an unnecessary jarring note, poor empathy. Don't go out of your way to annoy editors; a MS this long has enough strikes against it.

P. 474: What is the shape of an aspirin tablet in 2892 A.D., or whatever it is? Do they still use aspirin? If so, still in the pill form we are used to? This jerks me right back to the XXth century—false empathy. Find a figure of speech that will stand up through the centuries or simply describe it: a low, flat cylinder.

P. 582, line one: "Like"—shades of Winston cigarettes! Grrrr! Yes, it's quoted dialogue—but from an educated aristocrat. Slang, yes; solecisms, nyet!

Here and there throughout: None is singular, not plural; it is equivalent to "no one."

P. 599, line 11—spelling: The present participle of "mimic" is "mimicking". (From the long jump from page 167 to page 474 you can see that I got hooked by the story and almost stopped making notes. That does not mean that there aren't just as plentiful errors in grammar, spelling, usage, punctuation, etc.; it means that I got so fascinated by this wonderful yarn that I couldn't stop reading. By the way, I have not checked any calculations nor matters of science; I assume that you have been as careful about those matters as you have been careless about these minor faults. I was fascinated by the notion of going inside a red giant. Delightful! I had to stop and realize the conditions to appreciate the beauty of this device. And essential to your plot, not just a gimmick. Good!)

P. 610 , line 19: "Twittered" Ouch! I suppose you have in mind the fluttered modulation. But must you call it that? It is not all that can be done with a pipe; it isn't even the commonest sound used. How about: "As the airlock opened, a full boatswain's chorus piped them aboard." Please? That simple little whistle has been used for untold years to pipe men to work, to pipe them into battle, to honor the splash of canvas-clad body into his watery grave, to greet kings and ambassadors. A commissioned chief boatswain in full dress still wears proudly on his chest the same shiny little pipe that he earned as a coxswain . . . emblem of his long hard climb up the hawsepipe. On behalf of thousands of living and dead who have earned the right to play that pipe, I ask you not to call its music "twittering."

Toward the end: Jerry, isn't the Lord President of the Commission a "minister Plenipotentiary and Ambassador Extraordinary"? If he is—and he seems to be, by today's protocol, you might work it in where appropriate; the name of that rank has a rolling majesty to it.

629, line 4: "Shishkebob" is the Turkish word for it. This being a Russian dinner don't you want to use the Russian for it: "Shashlik"? Both words are assimilated into English.

P. 646: "Discharge" is not idiomatic nor correct in these circumstances. He is not losing his commission; he is being placed on the inactive list at the pleasure and convenience of the sovereign whose commission he holds—i.e., "retired" involuntarily but honorably. (I would resent like hell hearing anyone say I had ever been "discharged" from the USNavy; I was and am and will be to the day I die a commissioned member of the regular line of the USNavy, my name is still in every annual edition of the Register—and I don't ever intend to let anything happen that could cause my name to be erased therefrom. True, I have that horrid piece of paper that says I am "totally and permanently disabled"—but if they call me tomorrow morning, I'll go, pot belly and all . . . with a song in my heart.

The correct thing to do, since he is being forced to retire under highly honorable conditions, is to bump him to rear admiral on the inactive list—but instead of ordering him "home" as would be usual, his retirement orders say that it is the Emperor's pleasure that Lord Blaine present his person to the Lord President of the Imperial Commission for duty thereon . . . and something about his diplomatic rank—just one rank junior to Fowler, whatever his rank is.

"Hell" is capitalized all the way through . . . which is incorrect in English unless you mean that town in Norway or that crater on Luna. Also it

is used for simple emphasis ca. 10 times too often; it ceases to be emphasis and becomes tiresome. We have a rich language; use it.

Vice Admiral vs Fleet Admiral—one character seems to be both or either. Today "Fleet Admiral" is a rank, five stars, same as field marshal. I suggest that this interstellar empire would need so big and complex a fleet that it might need several layers of command; rear admiral, vice admiral, admiral, fleet admiral, grand admiral, imperial admiral, or some such, to your taste. In any case, the boss admiral for the region beyond the Coal Sack should at least be "admiral" rather than "vice admiral."

Somewhere near the end: "agents provocateur"—the adjective fails to agree with its noun, so add an "s" to it.

And the end at last, at 0230 the morning of the 22nd—and I am exhausted and you are, too, and forgive me for making it so long. Instead please respect the fact that I have worked so hard on it (five days now and long, hard days)—even if you don't like what I've said and don't do any of it. I realize that I have recommended much tedious work, a long delay, new expenses for typing and Xeroxing. But I am not doing it frivolously; I want this book to be a great success.

My respects to both your wives. Ginny and I continue to spend too much time with M.D.s and dentists but we are happy and enjoying life nevertheless.

/s/

Friday afternoon 22 June 1973

P.S. to Jerry

Omitted item—"Mister" vs. "Mister So-and-So": By long custom one may address any officer below command rank (3 stripes, scrambled eggs on cap visor) as "Mister Surname." Only a plebe snottie may be addressed as "Mister" without tacking on his last name—and you have no plebes in this book; they are all passed midshipmen, serving as JOs. To address anyone other than a plebe as "Mister" alone is an intentional insult and construed as such. Under extreme circumstances a senior may use this put-down to a junior . . . but it is so brutal a breaking off of all social relations that the junior will thereafter avoid that senior in every way possible; he's been told he's on that man's S-list. If it's his skipper or immediate boss, the junior might ask for despatch orders to any ship or station.

But calling a man "Mister" without his surname is so very rare that I have never heard it, I have merely heard of it.

Jerry, I know that you have had far more honest-to-God military service than I have . . . but you have chosen to use current naval customs as your symbols for a parallel situation in the distant future, so I assume that you would wish to be told such fussy points. By the way, your midshipmen call each other "Mister Staley" or such even in the gunroom. Today this would be most unlikely; the formal honorific would be reserved for more formal occasion in the earshot of ranks above or below that of midshipman. The gunroom is a place to relax. A fresh-caught p.m. might be a bit formal in the gunroom while he's being sized up . . . but in days or weeks the mess president midshipman would tell him to knock off the crap here, Jones; you're off duty here.

I must add that that SOB currently wearing the CNO hat recently put out one of his infamous "Z-grams" ordering that the term "Mister" be dropped entirely in the Navy (even for plebes); each officer and warrant officer will henceforth be addressed by his full official rank at all times. You can't say "Mr. Phelps"—you must say "Chief Aviation Boatswain Phelps"!!! Well, he will have to retire soon and I predict that this too shall pass. Customs are much harder to change than orders. Besides, you are modeling after British customs; your use of "gunroom" rather than "steerage" and your omission of the rank of ensign tipped me off to that.

Again my apologies for so long a letter. As Woodrow Wilson once wrote: "I am sorry but I did not have time to write a short letter."

I am feeling very depressed today. First the headlines— Then the morning mail brought a long letter from a career USN petty officer. One page of it was a fan letter; the rest of it bemoaned the present state of discipline. He wants a taut ship and deplore's Z's efforts to "liberalize" (his word) the Navy. He doesn't want officers to be "palsy-walsy" with him; he wants them to behave like officers. He can't understand that case in which 300-odd men refused to return to their ship—and got away with it. I don't know how to answer him. I agree with him . . . but Z has the job and it's not professional to undercut him by criticizing his policies to a P.O. under his command. Somehow I must walk on eggs.

P.P.S.

I have two more MSS/galleys on hand this week; I have glanced at them, probably won't read them. They come in with monotonous regularity. If it is a MS and I don't recognize the name on it as someone I know, like, and

trust, I send it back unopened. Galleys I open, glance at, and usually throw away. I usually don't acknowledge receipt of MSS/galleys/bound books not yet published; it just gives them a foot in the door. I haven't read one since January until yours came along . . . and I refused to puff that one. Your first book was the last one I recall puffing—ca. 4 or five years back.

I am telling you this because I criticized your MS so sharply. I read it simply because both authors were friends; I criticized it as I did because I think so well of it and want it to succeed.

I'm tough about not reading galleys and such because I really don't have time to be an unpaid literary critic—shucks, I don't have time enough to keep up with all the technical nonfiction I should read in order to stay abreast of developments. If I gave in and read the galleys etc. that I am asked to read—and handed out puffs—the flood would get out of hand.

I am not being an intentional SOB; I am simply a man with far too much to do and too little time remaining to do it in. This week I turned down a TV appearance, a radio appearance, and a N.A. Newspaper Alliance interview all three on behalf of my new book. But I did take five long days to do nothing but work on MOTELITE—because I think it is basically great and I want it to succeed.

/s/

Robert Heinlein and Virginia Gersterfield at their trailer park in Ft. Worth, Texas, just before *Space Cadet* was written, late fall 1947. Permission by Robert A. and Virginia Heinlein Prize Trust.

BEYOND DOUBT

From the June number of *The Science Review*

SAVANT SOLVES SECRET OF EASTER ISLAND IMAGES

" . . . according to Professor J. Howard Erlenmeyer, Sc.D., Ph.D., F. R. S., director of the Archeological Society's Easter Island Expedition. Professor Erlenmeyer was quoted as saying, 'There can no longer be any possible doubt as to the significance of the giant monolithic images which are found in Easter Island. When one considers the primary place held by religious matters in all primitive cultures, and compares the design of these images with artifacts used in the rites of present day Polynesian tribes, the conclusion is inescapable that these images have a deep esoteric religious significance. Beyond doubt, their large size, their grotesque exaggeration of human form, and the seemingly aimless, but actually systematic, distribution gives evidence of the use for which they were carved, to wit; the worship of . . . '"

WARM, AND INCREDIBLY GOLDEN, the late afternoon sun flooded the white-and-green city of Nuria, gilding its maze of circular crisscrossed streets. The Towers of the Guardians, rising high above the lushly verdant hills, gleamed like translucent ivory. The hum from the domed buildings of the business district was muted while merchants rested in the cool shade of luxuriant, moistly green trees, drank refreshing okrada, and gazed out at the great hook-prowed green-and-crimson ships riding at anchor in the harbor—ships from Hindos, from Cathay, and from the far-flung colonies of Atlantis.

In all the broad continent of Mu there was no city more richly beautiful than Nuria, capital of the province of Lac.

But despite the smiling radiance of sun, and sea, and sky, there was an undercurrent of atmospheric tenseness—as though the air itself were a tight coil about to be sprung, as though a small spark would set off a cosmic explosion.

Co-written with Elma Wentz. First published in *Astonishing Stories*, April 1941 as by "Lyle Monroe" and Elma Wentz. Never subsequently collected by Heinlein. Source Text: *Off the Main Sequence*, ed. Andrew Wheeler (Doubleday, 2006).

Through the city moved the sibilant whispering of a name—the name was everywhere, uttered in loathing and fear, or in high hope, according to the affiliations of the utterer,—but in any mouth the name had the potency of thunder.

The name was Talus.

Talus, apostle of the common herd; Talus, on whose throbbing words hung the hopes of a million eager citizens; Talus, candidate for governor of the province of Lac.

In the heart of the tenement district, near the smelly waterfront, between a narrow side street and a garbage alley was the editorial office of Mu Regenerate, campaign organ of the Talus-for-Governor organization. The office was as quiet as the rest of Nuria, but with the quiet of a spent cyclone. The floor was littered with twisted scraps of parchment, overturned furniture, and empty beer flagons. Three young men were seated about a great, round, battered table in attitudes that spoke their gloom. One of them was staring cynically at an enormous poster which dominated one wall of the room. It was a portrait of a tall, majestic man with a long curling white beard. He wore a green toga. One hand was raised in a gesture of benediction. Over the poster, under the crimson-and-purple of crossed Murian banners, was the legend:

TALUS FOR GOVERNOR!

The one who stared at the poster let go an unconscious sigh. One of his companions looked up from scratching at a sheet of parchment with a stubby stylus. "What's eating on you, Robar?"

The one addressed waved a hand at the wall. "I was just looking at our white hope. Ain't he beautiful? Tell me, Dolph, how can anyone look so noble, and be so dumb?"

"God knows. It beats me."

"That's not quite fair, fellows," put in the third, "the old boy ain't really dumb; he's just unworldly. You've got to admit that the Plan is the most constructive piece of statesmanship this country has seen in a generation."

Robar turned weary eyes on him. "Sure. Sure. And he'd make a good governor, too. I won't dispute that; if I didn't think the Plan would work, would I be here, living from hand to mouth and breaking my heart on this bloody campaign? Oh, he's noble all right. Sometimes he's so noble it gags me. What I mean is: Did you ever work for a candidate that was so bull-headed stupid about how to get votes and win an election?"

"Well . . . no."

"What gets me, Clevum," Robar went on, "is that he could be elected so easily. He's got everything; a good sound platform that you can stir people up with, the correct background, a grand way of speaking, and the most beautiful appearance that a candidate ever had. Compared with Old Bat Ears, he's a natural. It ought to be just one-two-three. But Bat Ears will be re-elected, sure as shootin'."

"I'm afraid you're right," mourned Clevum. "We're going to take such a shellacking as nobody ever saw. I thought for a while that we would make the grade, but now—Did you see what the *King's Men* said about him this morning?"

"That dirty little sheet—What was it?"

"Besides some nasty cracks about Atlantis gold, they accused him of planning to destroy the Murian home and defile the sanctity of Murian womanhood. They called upon every red-blooded one hundred percent Murian to send this subversive monster back where he came from. Oh, it stank! But the yokels were eating it up."

"Sure they do. That's just what I mean. The governor's gang slings mud all the time, but if we sling any mud about Governor Vortus, Talus throws a fit. His idea of a news story is a nifty little number about comparative statistics of farm taxes in the provinces of Mu . . . What are you drawing now, Dolph?"

"This." He held up a ghoulish caricature of Governor Vortus himself, with his long face, thin lips, and high brow, atop of which rested the tall crimson governor's cap. Enormous ears gave this sinister face the appearance of a vulture about to take flight. Beneath the cartoon was the simple caption:

BAT EARS FOR GOVERNOR

"There!" exclaimed Robar, "that's what this campaign needs. Humor! If we could plaster that cartoon on the front page of *Mu Regenerate* and stick one under the door of every voter in the province, it 'ud be a landslide. One look at that mug and they'd laugh themselves sick—and vote for our boy Talus!"

He held the sketch at arms length and studied it, frowning: Presently he looked up. "Listen, dopes—Why not do it? Give me one last edition with some guts in it. Are you game?"

Clevum looked worried. "Well . . . I don't know . . . What are you going to use for money? Besides, even if Oric would crack loose from the dough,

how would we get an edition of that size distributed that well? And even if we did get it done, it might boomerang on us—the opposition would have the time and money to answer it."

Robar looked disgusted. "That's what a guy gets for having ideas in this campaign—nothing but objections, objections!"

"Wait a minute, Robar," Dolph interposed. "Clevum's kicks have some sense to them, but maybe you got something. The idea is to make Joe Citizen laugh at Vortus, isn't it? Well, why not fix up some dodgers of my cartoon and hand 'em out at the polling places on election day?"

Robar drummed on the table as he considered this. "Umm, no, it wouldn't do. Vortus' goon squads would beat the hell out of our workers and hijack our literature."

"Well, then how about painting some big banners with old Bat Ears on them? We could stick them up near each polling place where the voters couldn't fail to see them."

"Same trouble. The goon squads would have them down before the polls open."

"Do you know what, fellows," put in Clevum, "what we need is something big enough to be seen and too solid for the Governor's plug-uglies to wreck. Big stone statues about two stories high would be about right."

Robar looked more pained than ever. "Clevum, if you can't be helpful, why not keep quiet? Sure, statues would be fine—if we had forty years and ten million simoleons."

"Just think, Robar," Dolph jibed, with an irritating smile, "if your mother had entered you for the priesthood, you could integrate all the statues you want—no worry, no trouble, no expense."

"Yeah, wise guy, but in that case I wouldn't be in politics—Say!"

"'S trouble?"

"Integration! Suppose we *could* integrate enough statues of old Picklepuss—"

"How?"

"Do you know Kondor?"

"The moth-eaten old duck that hangs around the Whirling Whale?"

"That's him. I'll bet he could do it!"

"That old stumblebum? Why, he's no adept; he's just a cheap unlicensed sorcerer. Reading palms in saloons and a little jackleg horoscopy is about all he's good for. He can't even mix a potent love philtre: I know; I've tried him."

"Don't be too damn certain you know all about him. He got all tanked up one night and told me the story of his life. He used to be a priest back in Ægypt."

"Then why isn't he now?"

"That's the point. He didn't get along with the high priest. One night he got drunk and integrated a statue of the high priest right where it would show up best and too big to be missed—only he stuck the head of the high priest on the body of an animal."

"Whew!"

"Naturally when he sobered up the next morning and saw what he had done all he could do was to run for it. He shipped on a freighter in the Red Sea and that's how come he's here."

Clevum's face had been growing longer and longer all during the discussion. He finally managed to get in an objection. "I don't suppose you two red hots have stopped to think about the penalty for unlawful use of priestly secrets?"

"Oh, shut up, Clevum. If we win the election, Talus'll square it. If we lose the election—Well, if we lose, Mu won't be big enough to hold us whether we pull this stunt or not."

Oric was hard to convince. As a politician he was always affable; as campaign manager for Talus, and consequently employer of Robar, Dolph, and Clevum, the boys had sometimes found him elusive, even though chummy.

"Ummm, well, I don't know—" he had said, "I'm afraid Talus wouldn't like it."

"Would he need to know until it's all done?"

"Now, boys, really, ah, you wouldn't want me to keep him in ignorance . . ."

"But, Oric, you know perfectly well that we are going to lose unless we do something, and do it quick."

"Now, Robar, you are too pessimistic." Oric's pop eyes radiated synthetic confidence.

"How about that straw poll? We didn't look so good; we were losing two to one in the back country."

"Well . . . perhaps you are right, my boy." Oric laid a hand on the younger man's shoulder. "But suppose we do lose this election; Mu wasn't built in a day. And I want you to know that we appreciate the hard, unsparing work that you boys have done, regardless of the outcome. Talus won't

forget it, and neither shall, uh, I . . . It's young men like you three who give me confidence in the future of Mu—"

"We don't want appreciation; we want to win this election."

"Oh, to be sure! To be sure! So do we all—none more than myself. Uh—how much did you say this scheme of yours would cost?"

"The integration won't cost much. We can offer Kondor a contingent fee and cut him in on a spot of patronage. Mostly we'll need to keep him supplied with wine. The big item will be getting the statues to the polling places. We had planned on straight commercial apportation."

"Well, now, that will be expensive."

"Dolph called the temple and got a price—"

"Good heavens, you haven't told the priests what you plan to do?"

"No, sir. He just specified tonnage and distances."

"What was the bid?"

Robar told him. Oric looked as if his first born were being ravaged by wolves. "Out of the question, out of the question entirely," he protested.

But Robar pressed the matter. "Sure it's expensive—but it's not half as expensive as a campaign that is just good enough to lose. Besides—I know the priesthood isn't supposed to be political, but isn't it possible with your connections for you to find one who would do it on the side for a smaller price, or even on credit? It's a safe thing for him; if we go through with this we'll *win*—it's a cinch."

Oric looked really interested for the first time. "You might be right. Mmmm—yes." He fitted the tips of his fingers carefully together. "You boys go ahead with this. Get the statues made. Let me worry about the arrangements for apportation." He started to leave, a preoccupied look on his face.

"Just a minute," Robar called out, "we'll need some money to oil up old Kondor."

Oric paused. "Oh, yes, yes. How stupid of me." He pulled out three silver pieces and handed them to Robar. "Cash, and no records, eh?" He winked.

"While you're about it, sir," added Clevum, "how about my salary? My landlady's getting awful temperamental."

Oric seemed surprised. "Oh, haven't I paid you yet?" He fumbled at his robes. "You've been very patient; most patriotic. You know how it is—so many details on my mind, and some of our sponsors haven't been prompt about meeting their pledges." He handed Clevum one piece of silver. "See me the first of the week, my boy. Don't let me forget it." He hurried out.

* * *

The three picked their way down the narrow crowded street, teeming with vendors, sailors, children, animals, while expertly dodging refuse of one kind or another, which was unceremoniously tossed from balconies. The Whirling Whale tavern was apparent by its ripe, gamey odor some little distance before one came to it. They found Kondor draped over the bar, trying as usual to cadge a drink from the seafaring patrons.

He accepted their invitation to drink with them with alacrity. Robar allowed several measures of beer to mellow the old man before he brought the conversation around to the subject. Kondor drew himself up with drunken dignity in answer to a direct question.

"Can I integrate simulacra? My son you are looking at the man who created the Sphinx." He hiccoughed politely.

"But can you still do it, here and now?" Robar pressed him, and added, "For a fee, of course."

Kondor glanced cautiously around. "Careful, my son. Some one might be listening . . . Do you want original integration, or simply re-integration?"

"What's the difference?"

Kondor rolled his eyes up, and inquired of the ceiling, "What do they teach in these modern schools? Full integration requires much power, for one must disturb the very heart of the aether itself; re-integration is simply a re-arrangement of the atoms in a predetermined pattern. If you want stone statues, any waste stone will do."

"Re-integration, I guess. Now here's the proposition—"

"That will be enough for the first run. Have the porters desist." Kondor turned away and buried his nose in a crumbling roll of parchment, his rheumy eyes scanning faded hieroglyphs. They were assembled in an abandoned gravel pit on the rear of a plantation belonging to Dolph's uncle. They had obtained the use of the pit without argument, for, as Robar had reasonably pointed out, if the old gentleman did not know that his land was being used for illicit purposes, he could not possibly have any objection.

Their numbers had been augmented by six red-skinned porters from the Land of the Inca—porters who were not only strong and untiring but possessed the desirable virtue of speaking no Murian. The porters had filled the curious ventless hopper with grey gravel and waited impassively for more toil to do. Kondor put the parchment away somewhere in the folds of his disreputable robe, and removed from the same mysterious recesses a tiny instrument of polished silver.

"Your pattern, son."

Dolph produced a small waxen image, modelled from his cartoon of Bat Ears. Kondor placed it in front of him, and stared through the silver instrument at it. He was apparently satisfied with what he saw, for he commenced humming to himself in a tuneless monotone, his bald head weaving back and forth in time.

Some fifty lengths away, on a stone pedestal, a wraith took shape. First was an image carved of smoke. The smoke solidified, became translucent. It thickened, curdled. Kondor ceased his humming and surveyed his work. Thrice as high as a man stood an image of Bat Ears—good honest stone throughout. "Clevum, my son," he said, as he examined the statue, "will you be so good as to hand me that jug?"

The gravel hopper was empty.

Oric called on them two days before the election. Robar was disconcerted to find that he had brought with him a stranger who was led around through the dozens of rows of giant statues. Robar drew Oric to one side before he left, and asked in a whisper, "Who is this chap?"

Oric smiled reassuringly. "Oh, he's all right. Just one of the boys—a friend of mine."

"But can he be trusted? I don't remember seeing him around campaign headquarters."

"Oh, sure! By the way, you boys are to be congratulated on the job of work you've done here. Well, I must be running on—I'll drop in on you again."

"Just a minute, Oric. Are you all set on the apportation?"

"Oh, yes. Yes indeed. They'll all be distributed around to the polling places in plenty of time—every statue."

"When are you going to do it?"

"Why don't you let me worry about those details, Robar?"

"Well . . . you are the boss, but I still think I ought to know when to be ready for the apportation."

"Oh, well, if you feel that way, shall we say, ah, midnight before election day?"

"That's fine. We'll be ready."

Robar watched the approach of the midnight before election with a feeling of relief. Kondor's work was all complete, the ludicrous statues were lined up, row on row, two for every polling place in the province of Lac,

and Kondor himself was busy getting reacquainted with the wine jug. He had almost sobered up during the sustained effort of creating the statues.

Robar gazed with satisfaction at the images. "I wish I could see the Governor's face when he first catches sight of one of these babies. Nobody could possibly mistake who they were. Dolph, you're a genius; I never saw anything sillier looking in my life."

"That's high praise, pal," Dolph answered. "Isn't it about time the priest was getting here? I'll feel easier when we see our little dollies flying through the air on their way to the polling places."

"Oh, I wouldn't worry. Oric told me positively that the priest would be here in plenty of time. Besides, apportation is fast. Even the images intended for the back country and the far northern peninsula will get there in a few minutes—once he gets to work."

But as the night wore on it became increasingly evident that something was wrong. Robar returned from his thirteenth trip to the highway with a report of no one in sight on the road from the city.

"What'll we do?" Clevum asked.

"I don't know. Something's gone wrong; that's sure."

"Well, we've got to do something. Let's go back to the temple and try to locate him."

"We can't do that; we don't know what priest Oric hired. We'll have to find Oric."

They left Kondor to guard the statues and hurried back into town. They found Oric just leaving campaign headquarters. With him was the visitor he had brought with him two days before. He seemed surprised to see them. "Hello boys. Finished with the job so soon?"

"He never showed up," Robar panted.

"Never showed up? Well, imagine that! Are you sure?"

"Of course we're sure; we were there!"

"Look," put in Dolph, "what is the name of the priest you hired to do this job? We want to go up to the temple and find him."

"His name? Oh, no, don't do that. You might cause all sorts of complications. I'll go to the temple myself."

"We'll go with you."

"That isn't necessary," he told them testily. "You go on back to the gravel pit, and be sure everything is ready."

"Good grief, Oric, everything has been ready for hours. Why not take Clevum along with you to show the priest the way?"

"I'll see to that. Now get along with you."

Reluctantly they did as they were ordered. They made the trip back in moody silence. As they approached their destination Clevum spoke up, "You know, fellows—"

"Well? Spill it."

"That fellow that was with Oric—wasn't he the guy he had out here, showing him around?"

"Yes; why?"

"I've been trying to place him. I remember now—I saw him two weeks ago, coming out of Governor Vortus' campaign office."

After a moment of stunned silence Robar said bitterly, "Sold out. There's no doubt about it; Oric has sold us out"

"Well, what do we do about it?"

"What can we do?"

"Blamed if I know."

"Wait a minute, fellows," came Clevum's pleading voice, "Kondor used to be a priest. Maybe he can do apportation."

"Say! There's a chance! Let's get going."

But Kondor was dead to the world.

They shook him. They poured water in his face. They walked him up and down. Finally they got him sober enough to answer questions.

Robar tackled him. "Listen, pop, this is important: Can you perform apportation?"

"Huh? Me? Why, of course. How else did we build the pyramids?"

"Never mind the pyramids. Can you move these statues here tonight?"

Kondor fixed his interrogator with a bloodshot eye. "My son, the great Arcane laws are the same for all time and space. What was done in Ægypt in the Golden Age can be done in Mu tonight."

Dolph put in a word. "Good grief, pop, why didn't you tell us this before."

The reply was dignified and logical. "No one asked me."

Kondor set about his task at once, but with such slowness that the boys felt they would scream just to watch him. First, he drew a large circle in the dust. "This is the house of darkness," he announced solemnly, and added the crescent of Astarte. Then he drew another large circle tangent to the first. "And this is the house of light." He added the sign of the sun god.

When he was done, he walked widder-shins about the whole three times the wrong way. His feet nearly betrayed him twice, but he recovered, and continued his progress. At the end of the third lap he hopped to the center of the house of darkness and stood facing the house of light.

The first statue on the left in the front row quivered on its base, then rose into the air and shot over the horizon to the east.

The three young men burst out with a single cheer, and tears streamed down Robar's face.

Another statue rose up. It was just poised for flight when old Kondor hiccoughed. It fell, a dead weight, back to its base, and broke into two pieces. Kondor turned his head.

"I am truly sorry," he announced; "I shall be more careful with the others."

And try he did—but the liquor was regaining its hold. He wove to and fro on his feet, his aim with the images growing more and more erratic. Stone figures flew in every direction, but none travelled any great distance. One group of six flew off together and landed with a high splash in the harbor. At last, with more than three fourths of the images still untouched he sank gently to his knees, keeled over, and remained motionless.

Dolph ran up to him and shook him. There was no response. He peeled back one of Kondor's eyelids and examined the pupil. "It's no good," he admitted. "He won't come to for hours."

Robar gazed heartbrokenly at the shambles around him. There they are, he thought, worthless! Nobody will ever see them—just so much left over campaign material, wasted! My biggest idea!

Clevum broke the uncomfortable silence. "Sometimes," he said, "I think what this country needs is a good earthquake."

> *"'. . . the worship of their major deity.*
>
> *"'Beyond doubt, while errors are sometimes made in archeology, this is one case in which no chance of error exists. The statues are clearly religious in significance. With that sure footing on which to rest the careful scientist may deduce with assurance the purpose of . . .'"*

NOTES

Elma Wentz was Upton Sinclair's personal secretary when Heinlein joined the EPIC movement in 1934. She and husband Roby Wentz became personal friends of the Heinleins, and Roby managed Robert's campaign for a seat in the California State Assembly in 1938.

Elma had for a long time wanted to become a writer, and when Robert Heinlein was casting around for a new career after his campaign, the subject of writing for pulp naturally came up. She encouraged him and pointed him to Jack Woodford's 1933 book on commercial writing, *Trial and Error*. By April 1939, Elma's prodding bore fruit, and Heinlein went on to become one of the most successful pulp writers of all time, in a class with Dashiell Hammet, Raymond Chandler, and Rex Stout.

Elma had a harder time getting started. By the summer of 1939, Robert's weekly Saturday night "salons" had begun to change over from politicos to writers. Elma and Roby crossed over (Roby eventually selling stories to *Astounding*, as well). One night in July, Robert claimed that a saleable short story could be created and outlined in half an hour. Challenged, he came up with a three-page outline-sketch for "Beyond Doubt" and gave it to Elma Wentz to flesh out. A few months later, she came up with an 8,000-word story that included a "wan but beautiful" heroine, Orsella.

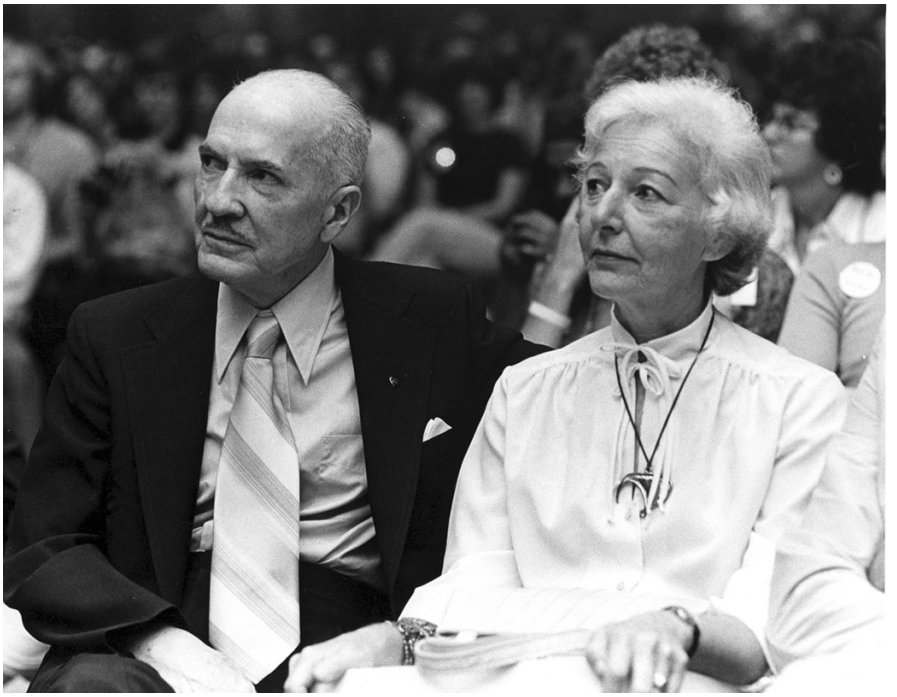
After an early rejection by John Campbell ("I think it's funny; my usual publisher didn't"), the story began making the rounds. Heinlein gave it to Julius Schwartz to agent. A year later, probably between "Logic of Empire" and "Universe" in the fall of 1940, Heinlein took a careful look at his problem child and drastically revised it—cutting away the nonessentials (including the character of Orsella) and developing what is essentially a new story line out of the same materials. The final story counted out at 4,309 words.

"Beyond Doubt" was among a number of manuscripts offered to Fred Pohl, who eventually bought the story for *Astonishing*'s April 1941 issue as by "Lyle Monroe" and Elma Wentz, and with evocative illustrations by the phenom Hannes Bok.

After that, the story languished in Heinlein's files until 1952. The field of science fiction anthologies had made a big splash during and immediately

after World War II, and Frederik Pohl had a contract for an anthology, *Beyond the End of Time*. He remembered "Beyond Doubt": "It's a good story, and supplies a needed light touch in the fairly ponderous lineup I wound up with." Elma Wentz had long since divorced Roby and remarried. Robert was glad to have occasion to get back in touch. She had made a modest success as a writer for the slick magazines; science fiction was simply not her bailiwick. Pohl could use Heinlein's real name for this publication, but his collaborator's pen name was "Elma Miller."

Heinlein never enjoyed collaborations—"twice the work for half the money," Ginny summarized his attitude—and "Beyond Doubt" is his only acknowledged fictional collaboration, though John Campbell's input into the planning of several stories sometimes approached by-line status (Heinlein actually offered a by-line on the book publication of the novel written from Campbell's outline, *Sixth Column*, but Campbell demurred, saying his participation was no more than the input of the kind of editorial story conferences he had done hundreds of times over the years). The only other acknowledged collaboration of any kind was for a fact-article after World War II, co-written with friend and U.S. Naval Academy classmate Cal Laning (which will be found in the Virginia Edition volumes of Heinlein's nonfiction).



Robert and Virginia Heinlein at MidAmeriCon in 1976. This convention marked Heinlein's third stint as WorldCon Guest of Honor and the first at which he promoted a blood drive. Photo and permission by Jay Kay Klein.

LETTER TO F. M. BUSBY ON FREEDOM AND RACE RELATIONS

1964–1965 Letter to F.M. Busby

[EDITOR'S NOTE: This letter may never have been sent, possibly due (in part) to its racial contents, still incandescently incendiary forty-five years later. Heinlein moved the letter bodily to his "Story Notes" desk file, possibly because of its relevance to the underlying background of *Farnham's Freehold*.

The first page of the letter is missing, so we pick it up in mid-sentence and undated, though Virginia Heinlein noted on an index card stored with the letter that it must, by internal evidence, have been written sometime in 1964 or 1965 and in any event before October 1965 (when the Heinleins moved from Colorado Springs). The letter is printed otherwise complete and as Heinlein wrote it.

It should be noted that this letter was written before the Civil Rights Movement, already well under way, made its biggest public impact and changed the way we speak and think of race relations in this country and so reflects a "hard common sense" approach dating before that cultural watershed. Much of the material it deals with was completely submerged at the time, though some details (i.e., the mechanics of "blockbusting") became common, public property later. The entire text thus provides context for placing the letter in a historical context. It is also worth noting that most of Heinlein's arguments are of a sort that would later be identified as "hard core libertarian."

Most of the letter seems to be critiquing a position taken by Busby in a fanzine article, showing that the position was oversimplified in view of the complexities of real life and must be viewed as *reductio ad absurdam* and organizing, rather than talking out, Heinlein's own positions on the matters.]

[. . .]proud to associate with most ofays. I have made rather more effort to meet and be friendly with Negroes than with whites, as I am both interested and curious. But the opportunities are slim. I had a Negro boss in the Railway Mail Service years ago. He was a good boss—but he gave me no chance to

be friendly. I had a Negro tutor in advanced calculus at UCLA; the closest I ever got to him was to lunch with him a couple of times. I was willing, he was not. Etc. I've known a few Negro officers, Fort Carson and elsewhere; I managed to get really friendly with just one, because his wife was a writer and needed some help. Hardly enough data on which to draw a curve.

All I'm trying to say is that if I have any prejudice against Negroes, I am not aware of it.

But I don't have any prejudice for Negroes, either. I don't feel any guilt over the fact that slavery existed in this country from 1619 to the Civil War. *I* didn't do it. Nor did any of my ancestors to the best of my knowledge (which is pretty complete) own slaves. I had many relatives and one grandfather on the Union side during the Civil War, none that I know of on the Southern side other than one cousin we aren't proud of—Jefferson Davis. But I'm not accepting any guilt on his behalf, either—*I* didn't do it.

Nor do I feel responsible for the generally low state of the Negro—as one Negro friend pointed out to me; the lucky Negroes were the ones who were enslaved. Having traveled quite a bit in Africa, I know what she means. One thing is clear: Whether one speaks of technology or social institutions, "civilization" was invented by us, not by the Negroes. As races, as cultures, we are five thousand years, about, ahead of them. Except for the culture, both institutions and technology, that they got from us, they would still be in the stone age, along with its slavery, cannibalism, tyranny, and utter lack of the concept we call "justice."

But it seems to me that the American Negroes (through their leaders, at least) are demanding, not "equality before the law," but "equality, period"—everything the whites have whether the Negro has earned it either racially or individually. One hears demands that Boeing or Douglas or General Motors employ at once the same percentage (or higher) of Negroes than we find in the population—and at every level. Well, anyone who has ever tried to hire skilled help knows that this cannot be done. (I tried to hire Negro engineers during the war; we managed to hire *one* out of about three hundred jobs. He was a real peecutter, a genius. I found *one* other candidate, an M.E., whom I turned down because he wasn't qualified.)

They are demanding such things as a percentage share of the acting jobs on TV—and demanding along with it that they not be shown in menial jobs. In other words they are demanding that a working dramatist (such as myself) put a very distorted picture of American life on the screen. No, thank you.

Buz, one of the sacrosanct assumptions is that the two races, white and black, really are "equal" save for environmental handicaps the Negro has unjustly suffered. Is this true? I don't know, not enough data observed by me, not enough reliable data observed by others, so far as I know. Obviously the two races are different physically, not only in color but in hair, bony structure, and in many other ways—blood types, for example. Must we nevertheless assume that, despite obvious and gross physical differences, these two varieties are nevertheless essentially identical in their nervous systems? I don't know but I do know that in any other field of science such an assumption would be regarded as just plain silly even as a working hypothesis, more so as a conclusive presumption not even to be questioned.

However, this question as to whether the two races are "different" or "equal" or what need never come up if we are concerned only with equality under the law—if each man is free to make of himself whatever he is capable of making of himself. When I hire a mechanical engineer I am not concerned with his skin color but I sure as hell am concerned with his grasp of mathematics, his knowledge of strength of materials, of linkages, of power plants, of instrumentation, etc.—and if he can't cut the buck, I certainly do not want to be forced to hire him because of his color. Nor does it matter to me (at the time of hiring) that he "never had a chance" to learn these things.

Nor am I certain that society is obligated to spoon-feed to him such a chance—whether he be white or black. The easiest way for a youngster to have the opportunity to have a broad education is to have rich parents—which a few Negroes have and which most whites do not, even though there are clearly more rich whites than rich Negroes. But most of the really well educated of any color do not have wealthy parents, they scrounged it out somehow. Some Negroes do manage to become number-one engineers—or Congressmen, or scientists, or whatever—and some whites wind up on skid row. Still more whites never amount to anything in particular, just get by, as taxi drivers, or bookkeepers, or suck broom salesmen, or such.

But, sez the voice of conscience, since obviously very few Negroes have rich parents and therefore less opportunity, shouldn't circumstances be equalized by a rich uncle? Uncle Sam?

Buz, I don't think so. In the first place Uncle ain't all that rich—and in the second place Uncle Sam doesn't have *any* money of his own; all he has is money that he has lifted from you and from me and from others who have earned it. One of the prime inducements to hard, money-making work—

perhaps the prime inducement other than hunger—is to pile up money for your kids, primarily for their educations. What happens to that inducement when Uncle Sam acts as the great equalizer, taking the money away from you (and your kids) in order to make things just as good, just as easy, for the kids of that janitor, or bootblack, (or bum, or criminal) across the tracks?

I had better shut up or I'll never finish this letter—I started out in this vein just intending to make a passing comment on your article. "Equality before the law"—Is it right to force white children to ride buses halfway across Manhattan in order that a kid in Harlem can sit next to a white child in second grade? I don't think so; I think the white child is being discriminated *against* because of his color. Should the State of Virginia be required to supply tax-supported, integrated public schools? I don't think so. Not only am I unable to find anything in the Constitution which *requires* public education of any sort but also I have grave doubts about the desirability of public schools. In any case, if the state does not supply it to any kids, white or black, then there certainly is no violation of the idea of equality before the law.

I might comment in passing that I have never yet heard of a white man, even a Southern white racist, protest that a Negro should not be allowed to learn calculus; what he objects to is having his kids forced to associate with said Negro while he learns it—and I am not sure but what he has a legitimate point, even though I do not share his feelings in the matter. Association should never be forced by law, it seems to me. Yeah, yeah, I know, association is forced by law in the armed services—but I happen to be opposed to all conscription at any time, including wartime. Do away with conscription and the association is no longer forced.

Housing—(Where we started.) You and I are in agreement that you (and I) and any other private home owner should not be required to sell his house to any but a buyer of his own choice. Okay, we need not argue that point.

But . . . from there you go on and make a distinction between a private-owner, such as yourself, and the owner of many houses or the owner of an apartment house. Now watch carefully because I am about to pull a dirty flanking attack on you—

I suggest that your right to sell or refrain from selling, to rent or refrain from renting is identical with that of the owner of Levittown, or the corporation that is renting those six new giant apartment houses over there on the bluff. I am not yet trying to show what those rights are; I am about to try to show that whatever they are, yours and his are identical in kind.

(Excursus, intended to confuse things: Avram Davidson once said—in

Cry, I believe, though it might have been in a letter to me—that he did not drink his brother's blood nor ride in Volkswagens. Avram's privilege, certainly. One may guess at his reasons, one may infer from the juxtaposition in his statement that his reasons have to do with Nazis and gas chambers—but it is not necessary at all to inquire into his reasons nor to speculate; Avram has a clearcut, both natural and constitutional, right not to buy a Volksie, for any reason, or for no reason.

(But it seems to me equally clear that the VW company has an equally clearcut right to refuse to sell a VW to Avram—for any reason, or for no reason. Because they don't like Jews, or because they don't like Avram, or because they think it spoils their "image" to have their car driven by a man with a beard. The essence of contract—as opposed to slavery or indentured service—is that both parties are free to contract, or to refuse to contract, and no one may require a reason for the exercise of that freedom. Else it ain't free. ((and this freedom is being eroded away in this country.)))

Let's assume that you have decided to sell your house; you're being transferred to Timbuctu and have no further use for it. Along comes a purple people eater with green spots and meets your terms. Fine—except that your bank says, "Sorry, we have found that purple people eaters are poor risks; we won't discount his paper" or, "This one is a good risk, perhaps, but we don't want p.p.e.'s in this neighborhood; they run down the values—and we expect to go on doing business here a long time and hold dozens of mortgages here." So either you have to turn him down, or take the paper to some other financial institution—which may have the same objections (and it's going to be a bitter cold day when any selectman manages to write an ordnance which will *force* a banker to discount paper he doesn't want to discount—nor should it ever happen)—or take the p.p.e.'s mortgage yourself—which doesn't suit you; what you want is $30,000 right now, so that you can buy a house for cash in Timbuctu, where buying houses on time is not well understood, especially to palefaced gentiles outside the Law.

So what do you do? You turn down the p.p.e. for clearcut financial reasons.

So far, you and the corporate subdivider are on the same terms; you both would refuse to sell for the same clearcut financial reasons, for please bear in mind that most subdividers do *not* hold their own paper; the purchase is either made through a bank or savings & loan in the first place, or the paper is discounted—for the subdivider almost always needs to keep his capital liquid in order to go on building. It would be utterly unreasonable to ask

him to accept a mortgage and hold it, no matter how good the risk—he has *got* to get his money out, or he stops being a builder.

So the banker is the son of a bitch in the deal—Or is he, now? Bankers never handle their own money to any important extent; they are custodians of other people's money. If the banker thinks that it is a bad deal in the long run, is it not his solemn duty to his stockholders and his depositors to refuse it? No matter how it offends the "human rights" of purple people eaters? Is he morally justified in hypothecating other people's money in a deal which he considers risky?—whether the risk be on that one piece of paper, or long-term risk for his whole crazy structure of loans and futures and so forth? I say he is not; he is a steward and must behave as one—not as a social reformer. Are you and I entitled to a backseat veto over his judgment? No, it ain't our money.

So far, I think, no argument— You, the banker, and the subdivider are each morally entitled to turn down the purple people eater for reasons sufficient to you.

Let that one example stand as typical of all the many straightforward business reasons for refusing a particular customer. Now let's branch out into the more esoteric reasons which (you say) are and should be sufficient for you to refuse to sell (as a private home owner) but which should not be permitted *by law* to a subdivider, or such—the commercial seller of any sort.

You mentioned an apple tree in the back corner of your yard.

You *love* that apple tree. You planted it yourself, it was a seedling your mother (now dead) had given to you—and it is a strain developed by your Uncle Luther (Burbank) Busby and carries his name. Many is the pleasant summer evening you have spent in a hammock under it, diddling, or at least thinking about it. Brother, that tree is the one part of that real estate you are really sentimental about.

But . . . it is well known (or at least widely believed) that the young of purple people eaters have, before puberty, this odd vice: They eat the bark of apple trees. Worse, they invariably ringbark so that the tree dies. They then let it stand, gray and sad and hopeless, until it falls.

As Herr P.P.E. is about to sigh the papers, he lets out the fact that while he has no kids (you had checked that point!) his two orphaned nephews, six and four, live with him. Oh migod! just the right age to ringbark an apple tree!

So what do you do, Buz? Back out? *You* say that you have every right to back out. But *do* you? Look, you're selling that house; what you need and

want is cash—and for this you are prepared to give an utter quitclaim to your ownership in it. Not yours once you sell—none of your business what happens to that tree. Or do you wish to retain some degree of ownership, or rights? And if you are, are you willing to knock $10,000 off the price in order to protect that tree from any hazard? Look, it's fee simple you are vending; do you really have any moral right to stick a covenant in the deed which will run with the deed, limiting this new owner and any future owner as to the disposition of part of the parcel, namely "one, tree, apple"?

(I say you do. I say that if you are silly enough to limit your market and possibly undergo financial loss, you should be free to refuse to sell anything that is yours to *any*one for *any* reason.)

But how about the subdivider and the house next to yours? This subdivision is known as "Apple Blossom Vista" and used to be an orchard. The subdivider has been most careful to keep the bulldozers away from any tree that could be saved, even going to great trouble in designing the houses and placing them. His big selling point is how A.B.Vista looks, as shown in color photos, with all the apple trees in bloom.

How many houses is he going to sell if he lets in just one family of purple people eaters?

This is not as fantastically hypothetical as it sounds. I am not a subdivider—and I shall sell this house, if and when, to a Negro if I bloody well please. In fact I have often thought that I would offer to do so, if and when, because I don't care whether my neighbors like it or not and I think I could get a better price that way. We live in a very wealthy neighborhood which has no Negroes—but there are prosperous Negroes in this town who would, I think, jump at the chance to buy into Broadmoor.

But down the street from me a subdivider does live. He is a wealthy, selfmade man, an Italian immigrant orphaned quite young, who nevertheless managed to acquire a degree (NYU) in aero engineering, and went from private to chicken colonel as a wartime soldier and peacetime reserve. He writes on the side and is the author of *The Wisdom of Epictetus* (Philosophical Library)—from which, if you know Epictetus, you know that he is not a racist son of a bitch. And he isn't. I know him quite well; he is a libertarian—even as you and I.

I have no idea how many houses he has built—many, many. He started out without a dime and has run it up into considerable wealth, somewhere in the millions, by ploughing his profits back in and expanding. He does not build crackerboxes; he builds houses individually styled for the upper

income brackets—but he builds them a hundred at a time with methods strongly resembling assembly line. I discussed with him this very point once—whether he would, or could, or should sell one of his houses to a Negro.

John said to me, "Bob, I had one come to me to buy a house in my (an upper middleclass subdivision he was then building in Pueblo). I turned him down. I said to him, "You pick out any lot you want that you can buy (i.e., in Pueblo this would probably mean a lot on that side of town in which Negroes then lived—R.A.H.) and I will build a house on it exactly like these and sell it to you at exactly the price you would pay here (which would mean a considerable loss to the builder, since he could not use his assembly-line methods on one house—R.A.H.) But I will not sell you one of these houses."

The deal did not go through. The Negro made it flatly plain that what he wanted was to buy one of the subdivision houses, with white neighbors on each side of him. There was no money problem involved; the Negro had the money—a dentist he was, if I recall correctly—and, anyhow, John would have accepted and held his paper if necessary to make his own word good.

Now—was my friend justified in refusing? Well, here is the rest of the story. John became wealthy by building houses in the postwar boom more efficiently than most contractors, selling them at lower prices, and at a small profit margin—and, as I mentioned above concerning a hypothetical subdivider, his capital is regularly tied up in his current construction. In this case he was building about ninety houses and had his neck stuck out for something over a million dollars.

So what would you have had him do, Buz? Sell to this one perfectly good risk?—then hold a fire sale on the other eighty-nine and go bankrupt?

("Ah, but he wouldn't go bankrupt! That's a myth.")

For the moment let's stipulate that it is a myth. The point is that myth or not, John *thought* that it would be financially disastrous to him (to his wife, his kids) to accept that sale. It was his land, his houses, his money—most of which he owed and would have to recover or go broke. It was not a matter of him not wanting himself to live next door to a Negro; John lives a quarter of a mile down Mesa Avenue, forty miles from this subdviision. Nor was it any lack of sympathy on his part for the desire of a Negro to have decent housing; he offered to cover that aspect at financial loss to himself—but loss of a magnitude he could afford. John's sole concern was a fixed belief that if he accepted this sale, it would keep him from selling the rest of his houses

at prices which would let him get his nut back, plus a reasonable profit. Money, pure and simple.

Are you willing to force him to act in a fashion which in his opinion spells financial disaster?

Now as to the "myth" about depreciated property values—I dunno, I have not had enough direct experience. But I do have one case to cite, that of a friend of mine in Denver, who now finds himself surrounded by "niggertown" and does not like it, for all the usual reasons: no longer safe for his wife to go out alone at night, neighborhood has acquired that rundown, uncared for look, chattels left outdoors no longer safe, etc. I can't say how much of this is true; the point is, he believes it and he is unhappy and would like to sell.

The neighborhood is not a ghetto or a slum in the accepted meanings at all; it is simply an area in which almost all of the whites have moved out since the Negroes have moved in. All the houses are "new" (built since WW II, I mean); they were built for whites on ample lots of brick or stone construction and priced to sell from $17,000 to $20,000.00.

I asked him why he did not put his house up for sale and move, since he felt that way? I can't afford to, he answered; I can't get anything like the amount out of it that we've put into it. So I says *huh*?—I thought that Negroes paid through the nose when they moved into a white neighborhood? Ah, he sez, but this is not a white neighborhood any longer. Now the selling price is much less than it cost to build them.

Here is the way he tells me it works: First phase, or block-busting—somebody (Heinlein, maybe, Broadmoor!) gets a fancy price, far above market, for the first house sold to a Negro in an all-white neighborhood. Maybe one or two others go for premium prices, too—then starts the second phase—panic selling, during which prices go way down and Negroes move in rapidly . . . but not necessarily at the lowest prices—the speculator who set up the block-busting gets the gravy. Then comes the third phase, with prices stabilized at a level much below the white-neighborhood price—and that is what Earl claims he is now up against. He and his wife like Negroes—or did, and she is still an active member of NAACP—and refused to panic when the first Negroes moved in. Now they don't like the environment they find themselves in at all but they can't afford to move.

Well, what do you think, Buz? Are you entitled to refuse to sell your house over an apple tree?—whereas, as you stated in *Cry*, my subdividing neighbor is not entitled to refuse to sell a house he does not live in . . . even

though he honestly believes it will bankrupt him . . . and his wife and his kids? Which one of you is being unreasonable? You and your apple tree? Or John and his jeopardized million dollars in capital?

I know what my answer would be: You *both* are entitled to do exactly as you see fit with your own property—and nobody else has any moral right to tell you that you must do something else. Anything less is not freedom . . . and if you owned an apartment house or a motel, or a restaurant, or were subdividing land and were wondering how you would meet your payroll, you would damn soon find it out.

("Ah, but if we had anti-discriminatory laws, the burden would not fall on individuals. It would even out and nobody would be hurt.")

This is a pleasant thought—but is it true? (It would be nice if pi were exactly 3.0, wouldn't it?) Remember prohibition? No government yet has been able to force the population to do anything that they really did not want to do . . . save by the most brutal of coercion.

Do you really think that a fair-housing act would persuade white customers to come along and pay John's prices for his subdivision houses if he did let Negro families move in? I don't. Nor would he sell his houses to Negroes. Fair or not, there are just not enough well-to-do Negroes in Pueblo to buy his houses. Justice or no justice, those houses were built with a certain income level in mind—and that level is almost entirely white.

Sure you can pass a law which permits any Negro to buy any house up for sale—deny the white owners the privilege of choosing, apple tree or no apple tree—but does that same law force the white man to move in alongside the Negro? If not, you are licked on this deal. Why? Consider an ideal case, as in math: three houses, side by side, one empty, two occupied by whites; the white man in the middle puts his house up for sale and along comes a Negro with the cash and the white (under the law) has no option but to sell it. Probably the ordnance doesn't even get him a block-busting price out of it; if the ordnance is carefully written he has to sell blind, establish his selling price. No, let's modify it to meet what you say would suit you: The middle house is occupied by a white man but he is not the owner; the owner lives elsewhere, say next door—or does that still give him too much of a sentimental interest to suit you? Put him in the next state. Anyhow he sells and, because of the law, he sells to the Negro.

Whereupon, either because of this or simply from being transferred to Timbuctu, the owner in the owner-occupied house next door decides to sell or is forced to sell. Since it is his own house (we're using your rules

now) he doesn't *hafta* sell to a Negro—he simply does, because no white buyers show up. He doesn't get as good a price for it as the first Negro paid . . . *as the first Negro paid for the privilege of moving in next door to a white family.* Ah, but I said that, because of the law, the first Negro does *not* have to pay a block-busting premium. Makes no difference—he didn't pay a premium price; he simply paid a white-man's price—but the *second* Negro pays a Negro-neighborhood price, lower. Then the third house, the empty one, sells—to a white man? Let's not be silly; the only whites who initiate a move into a black neighborhood are those on the skids—and can't even pay what a striving Negro can pay; a Negro buys it at a Negro neighborhood price.

The end result? The first Negro to move in feels cheated; he has had to pay white-man prices to move into what he thought was a white neighborhood—and he winds up living in a 100% black neighborhood, the very thing he was moving away from, the very environment he did not want for his own clean, well-behaved kids. His James-Baldwin syndrome is thereby enhanced.

Besides that, we have two white men, the former owners of the two end houses, who have less use for Negroes than they had before (whether they had formerly felt friendly to Negroes before—like my friend in Denver—or are real Ku-Kluxers from the jungles of Alabama)—less liking for Negroes than before because each has lost money in selling his home because a Negro moved in next door. Maybe they shouldn't feel that way but they do.

I could spend several pages describing how whites can get around fair-housing acts without quite fracturing the law. But I shan't do so—you can, I am sure, figure out a number of ways. Let it stand that I do not think that undesired association can be forced, save by the most brutal of coercion. You may be able, by law, to force the white man to sell. But you cannot, by any law proposed so far, force the other whites to refrain from moving out. And if the latter ever does become law, it won't stay law—because, like it or not; the white man is about seven to one in the majority and so coercive a law won't stay on the books long, nor be enforced while it's on the books. Remember Prohibition.

Here are two theorems—no, two observed facts which require no proof, being subject to direct observation.

A. Negroes, as they become prosperous, like to move into a neighborhood where they have white neighbors.

B. Once this happens, most whites move out as fast as they can to

neighborhoods where they think, or hope, that Negroes can't follow—and no new whites move into the "contaminated" neighborhood.

Aren't both of the above true? I am not discussing what you would do, or what I would do, nor whether it is just or unjust—aren't those two statements true, within your personal observation?

If they are true, do you see any effective way to change it *by law*?

As for myself, I don't give a damn, as any Negro who could afford to move into my neighborhood would probably have his daughters in the Sorbonne, his name in Who's Who, and bathe oftener than I do. I simply doubt the necessity for laws on the subject (either pro or con—I certainly do *not* want Apartheid laws, but I am just as strongly against forced-association laws, too)—I doubt both the necessity and the desirability of such laws, do not think they will improve the status of the Negro and *do* think that they will increase racial friction, which I regard as a bad thing.

"Necessity"—How about the "Negro ghettos" such as Harlem and South Chicago?

Buz, aren't these pocket-book ghettos, mostly? The Negro, on the average, is poor—and he'll have to be worth more before he is paid more. Fair-housing laws won't change this. Oh, perhaps we should all be socialists and *give* the poor as good housing as the better off have—but I'm not a socialist and I'm pretty sure you aren't one, either. I had to scratch for what I have (I was born in a house with no plumbing, no nothing, and have supported myself since I was fifteen) and I'm just bloody stingy enough to think that other people, black or white, ought to have to scratch for what they get, too. So—the Negro is poor and poor housing is an age-old aspect of poverty. The house I lived in during high school, a house with plumbing and electric lights, *much* better than the house I was born in is now occupied by a Negro family—and the whole neighborhood has been declared a slum, eligible for urban renewal. Does it rate it? Hell, no!—save to the extent that it has been allowed to run down by the present occupants. The houses are still sound; one of my aunts was living in one of them a block from where I lived, only two years ago. She moved, not because the house had gone to pieces, but to get away from the new neighbors.

Back to Harlem—Is it a ghetto? Well, it is certainly a Negro neighborhood and it certainly is stinking awful. Of course it used to be a wealthy, uptown neighborhood, but it is no longer. It doesn't have a wall around it—why don't the Negroes move out of it?

Nowhere to go!

Really? Buz, there are still a hell of a lot of worn-out farms along the New York, New Haven, & Hartford; what is to keep a group of Negro financiers from buying up some of that worthless farm land and building a brand-new commuters' paradise solely for Negroes? No Negro financiers rich enough? Then why not white speculators? Hell, I know plenty of white men who would sell their own grandmothers if the price was right. The answer of course is obvious: No financier, white or black, is going to subdivide Connecticut farmland to sell it to Negro commuters now living in Harlem. Surely, the Negro is anxious to get out of Harlem—but there isn't enough money pressure in his wallet to make such a subdivision in Connecticut pay. Besides, if he can afford such, he doesn't want to move to a *Black* garden subdivision; he wants white neighbors.

The Negro does not live in Harlem because he is black, but because he is poor. He clusters in neighborhoods because his poverty—and what goes with it—does indeed depress property values, and that attracts more of his own sort—poor, I mean; being black is only incidental. And I'm damned if you can cure any of these things by putting more coercive law on the books. The only real result will be to make white men dislike Negroes more than ever—a very bad outcome for the Negro since he is so decidely in the minority and, in the long run, depends on the white man's good will.

There ain't a durned thing wrong with the American Negro that money can't cure—provided he earns it himself and does not expect the white man to give it to him. He can get out of Harlem—with money. He can move to Beverly Hills, or Brentwood—with money; there are Negroes living in both areas. He can move to Broadmoor with money. I know he can, because he can buy my house. If somebody phones and mentions my price, I shan't ask him the color of his skin. My next door neighbor is really anxious to sell; he has knocked $20,000 off his price during the time his house has been on the market—he would happily sell to a purple people eater and my apple trees—only two of them—be damned! (If I could afford it, I would buy him out myself and tear down his house; it hurts my view.)

I don't think anyone would grouse about such a sale; we already have Chinese and Japanese in Broadmoor. There are no covenants of any sort about race in this neighborhood, nor any unspoken "gentlemen's agreements" that I've ever heard of. However, money talks. The one Chinese is a director of the Bank of Hong Kong and his house occupies one large city block with an eight-foot wall around it. But a Negro would run into one hazard having nothing to do with race. These parcels, all through

Broadmoor, do have one restrictive covenant enforceable at law: one lot, one house, one family—and it is a long-observed fact that when Negroes do buy into neighborhoods formerly white, the space is occupied quite frequently by three or four families where one white family formerly lived. Poverty again—they live that way not because they wish to, but because they must. But it is also a major reason why white owners aren't anxious to be forced to sell or rent to Negroes; such doubling and tripling up ruins the hell out of property values—that is what happened to Harlem.

Poverty is not cured by coercive legislation.

Buz, I cannot see in this new legislation, either local or national, intended to force property owners to sell to Negroes, or hotel or motel or restaurant owners to serve them, anything but coercive restriction of an owner's freedom to do as he wishes with his own—for reasons of money or of whim. (Forgot to mention—the world-famous Broadmoor Hotel, the *only* inn in this community, is not restricted against Negroes. Anyone with forty dollars a day for room rent and similar prices for food is welcome, regardless of color—purple people eaters may select apple bark either from the table d'hote, or a la carte, or they'll send out for it.)

Ah, but what about the Negro's rights? the Negro's freedoms? his right to travel freely in his own country? his right to find a clean bed and decent meals at the end of a long and wearisome day? This is the nub of the matter, his legitimate complaint if he has a legitimate complaint. Well, how would I feel if my skin were dark brown and I came breezing into Colorado Springs about ten p.m. and pulled into a motel with a "vacancy" sign, my car loaded with tired pickaninnies—and a smug, white fat man said blandly, "No vacancy! Oh, the sign? Forgot to turn it off." How would I feel? Hell, let's make it worse. I'm a stubborn bastard, so I park across the street and *watch*—and see him take in three loads of whites after turning me away. Let's even suppose, that by some means I can *prove* that the three loads of whites did *not* have reservations.

I would feel sore as hell, that's how I would feel. I would be greatly tempted to set fire to the dump. I might even be tempted enough actually to take a poke at the fat white liar.

But should I have recourse *at law*?

In some states an innkeeper is like a common carrier or a public utility. In one state—Vermont, I think it is—he must not only take in the wayfarer but also must be prepared to accommodate his horse, so many head of cattle, so many head of sheep, etc.—and the Broadmoor, by the way, is quite accustomed to accommodating horses and is equipped to accommodate *any*

live stock, including gila monsters. But even a dog is a strain on most motels along our highway. (Could it have been the dog in the back seat he turned me away for, rather than my black skin? If so, where do I stand legally? And what if he tells the court that he simply wasn't prepared for a family with four kids, regardless of color? However we are not now concerned with the difficulty of enforcing the law, but with the abstract matter of justice: Whether such a law should be on the books at all.)

Buz, I honestly do not think that any such law should be on the books. Certainly the citizen, pink, purple, or green, has a legal right to travel the public highway . . . but does he have a natural right and should he have an enforceable legal privilege to demand and receive goods and services from private entrepreneurs wherever he chooses to travel?

I do not think so. If I am that Negro (or white—or purple people eater) and you are that motel keeper, while it conceivably might be my "freedom" or "right" to demand that you serve me, it is utterly certain that if the law *forces* you to serve me—in your motel that you own—*your* right to own property and to enjoy it as you see fit has been seriously abridged. You are being forced, willy nilly, to take me in . . . and it happens that your wife who lives right there with you under the same roof has a morbid fear of men of my color (pink or purple or whatever), you are being forced, either with your own hands or those of your hired employees, to clean the pot after I have used it, to handle my dirty sheets, wash my dirty glasses? Certainly you are for hire but even a whore has the privilege of changing her mind at the last moment. *Must* you risk jail, or a heavy fine, or even be driven out of the business you have invested so much money and heartbreak in simply because you can't *prove* that it wasn't my magenta skin you rejected but rather the fact that you didn't care for my body odor, or possibly the dandruff on my shiny blue serge, or even the snot on the baby's upper lip? This is bound to be, by its very nature, one of those guilty-until-proved-innocent sort of laws, where the punishment turns on intent and the accused can never possibly prove that he was *not* prejudiced by race. Do you really want to put that sort of a law on the books?

For that matter why should not a *private owner* refuse to trade for reasons of sheer whim? (For example, because of a promise he made to a favorite apple tree out in his patio—a solemn promise that he would never let no god-dam nigguhs get close to it.) The Black Muslims run restaurants—licensed, inspected "public" restaurants—in which they turn away all white trade. Do I have a "right" to insist on service in a Black Muslim restaurant? I don't think so—yet it is clearly discrimination on account to my skin color.

I readily admit that it is pretty tough to be traveling and not be able to find a place to sleep—I know for I have had it happen to me, for two reasons, each of which left me with a dull anger at the whole world and nothing I could do about it. One reason was lack of money, the other was lack of a reservation and the joint (the whole city, it was Washington) was jam packed. Had it happen in Alaska, too, when I *did* have a reservation. It is bloody annoying, especially when you are dog tired.

Buz, if you are going to decide, by law, that a private owner may not follow his whim or prejudice with that which he owns, where do you stop? Or do you? Food and lodging? Or do we go on to all the things necessary to the health, comfort, and convenience of a traveler? Are any and all licensed doctors on call at all times to any traveller? (Conceded that most of them are, if you can catch them?) How about a bar? Must it serve all comers regardless of color or whatever? (Suppose the color happens to be red?—he's an American Indian—pretty stiff laws some places if you *do* serve him?) Okay, let's stipulate that liquor is not a necessity but suppose it is the very common restaurant-bar combo: Is the proprietor permitted to refuse to serve a drink to a Negro while he is required by law to serve him food, while simultaneously he serves both food and drink to the white man seated four inches away from him at the same counter? (I don't care which way you answer that one; you wind up in a bind. Coercion has its unavoidable paradoxes.)

Is clothing a necessity to a traveler? Hell, yes; they'll jail you if you don't have it—and clothing can be stolen. Do we deduce from that that any and all clothing stores must sell to anyone—or run a risk of jail for discrimination? If so, I know of more than one woman of one color who will not buy clothes from shops in which women of another color are permitted to try on clothes—for reasons sufficient to them.

Buz, if you are going to treat house and apartment owners, restaurant owners, and innkeepers as if they were monopolistic public utilities (which they demonstrably are *not*) *where do you stop*? Is a church a public utility? Some Negroes apparently think so; there have been more than one case of Negro demonstrators attempting to attend services in all-white churches. Is a dining room in a boarding house, one of the sort which has a little sign "Meals" in the window such as you see driving through the small towns of New England—is *that* a public utility? If not, just where do you draw the line between that small private enterprise and "Maw's Cafe" one block off the highway?

Is a clothing store required to serve Negroes but a custom tailor right

next door, made to order clothes only, permitted to choose his (her) clientele despite the public sign?

Most large hotels have a standard business practice of hiding away three or four rooms and at least one suite for reciprocity, complimentary, and good will purposes; when they say "full up," they do not mean that these accommodations are full. Is a customer who presents himself (never mind color, this should work for whites, too, if it is to work at all!)—is a man turned away by such a hotel entitled to haul the management into court?

Oh, hell, Buz, if you start abridging the owner's rights in order to give "rights" to a customer the owner does not happen to want to serve, there is *no* place where you can logically stop . . and you wind up creating a new class of slaves, the entrepreneur . . . who receives nothing in return, for he certainly is not guaranteed Negro trade, nor is he entitled to damages for any white trade he may lose through complying with this coercive law.

If there is a "natural right" to service on the part of the traveling public, black, white, or polka-dotted, has it always existed? If not, when did it, or does it, come into existence? I think I am prepared to show that it did not always exist, i.e., it does not exist in a state of nature. When you leave Fairbanks, headed north, the next restaurant is at Point Barrow, five hundred miles away. Where's that "natural right" of the traveler? Okay, then this "natural right," if it exists at all, comes into existence *after* an area is settled. (Please note that the legal right to travel exists between Fairbanks and [Point Barrow]; you have a choice between walking, or going by air—and the right to walk it existed before the air line. Whether it is a "natural right" need only be disputed with a few wolves, bears, and rather friendly eskimos.)

Does settlement alone produce this "natural right?" Not so you could notice it. There is a stretch just north of us, nearly thirty miles long, where I have often felt hungry and thirsty on the drive to Denver. There ain't nuthin' but prairie dogs, however—so I usually carry a little something in the car. (And I must point out that this is always a way open to a traveler who is not sure of exercising his "natural right" to buy food and drink, and one which I have often exercised, not only in far corners of the earth, but also right here in Colorado, both from necessity and choice.)

I am forced to conclude that this "natural right" if it exists, comes into existence only when you, F.M. Busby, hang out a sign reading "EATS"—at that moment comes into existence *my* natural right to force you to sit me down at a table and let me eat, no matter how my feet smell, how noisy I may be when I eat soup, or what—on pain of being hauled into court on

a charge that you refused me because of my deep sunburn, or my Japanese grandmother.

Buz, I don't think I *have* any such natural right. On the contrary I think *you* have a natural right to refuse any trade you don't want, whether you hang up such a sign or not, and without giving any reason for it . . . and certainly without being interrogated in court as to your reasons or your whims. Hell, Buz, it might be that your M.D. brother had told you very privately that I was Wasserman four-plus[1]—and in order to state your (legitimate—esthetically, at least) reason for turning me away, it would be necessary to tell the court and thereby give away the fact that your brother had fractured the Hippocratic oath in order to protect you from me—you and your daughter, that is, whom I had been trying to date up for later while sopping up your wife's homemade cherry pie.

The point to me, Buz, is that you do not surrender your natural rights to freedom and free choice simply because you sell food. *I* sell words, an area so free that it is protected by a special amendment to the constitution—yet the wide-open "freedom of the press" in this country is not so free but what I may refuse to sell any words to any publisher at any time for any reason, or no reason at all, nor may I be questioned by any one for my reasons for refusing.

But if you civil rights boys manage to put over this abridgment of the freedom of private owners to choose their customers as freely as the customer chooses them, the day may yet come when I won't dare offer a stick of copy to any white publisher without offering it to *Sepia*[2] first, lest I be accused of discriminating against the Negro press—abridging its "freedom" to enjoy just as wide a choice of copy as the white publishers.

However, I'll quit the writing business before I'll be coerced. And I would quit the hotel business, the real estate business (I was once in it), the restaurant business (I did once run a soft drink stand), or any other business in which busybodies come along and tell me I *must* deal with any particular person. Hell, I might not like his blue eyes and his bicycle—I simply can't *stand* these racing bikes with the low slung handlebars; they remind me of the curved horns of an African Buffalo. I got chased by an A.B. once, in the bush veldt—scared the hell out of me and I'm nervous every time I'm reminded

[1] "Wasserman four-plus." The Wasserman test is iconic for Syphilis (though it also yields results for malaria and other diseases); the "four plus" indicates a very severe case of Syphilis.

[2] A Black (African-American) culture and achievement magazine that existed between 1947 and 1983.

of it. Likely to spill the soup. So when you come riding up on your bicycle and I have to serve you, because of the law, *don't order soup*. It's dangerous. It's not your white skin I mind—it's those awful handlebars.

(P.S.—really did happen. We were in a Henry J. [Ford], which turned out to be quite a good car in a pinch; we got away. But I didn't get nervous about handle bars until just now when I thought of that ploy. Wonder if I could make it stand up in court? If your skin was black? And I deliberately spilled soup on you? There is more than one way of killing a cat than by smothering it with kisses—which is why I say, natural right or no natural right—and there ain't any sich—a truly unpopular law can't be enforced. Honest to God, Buz, the only thing the Negro can do, in the long run, about the fact that the white man in many cases, perhaps the majority of cases, doesn't want to eat with him, live next door to him, sit beside him, etc., is to accept the truth and try by his behavior to be more acceptable. I don't think he is going to do this, though. I think we are in for severe race trouble—which the poor brown bastard is certain to lose simply because we outnumber him seven to one.

(However, I do not recommend patience to the Negro of South Africa. He outnumbers his white neighbors about four to one, or more. His proper solution is to arise some dark night and cut the throats of his white oppressor—which they richly deserve. But I don't intend to help him with the job; it is *his* job. Freedom is never bestowed; it is earned.

(Which—and not "incidentally"—is the reason the American Negro is not yet free: He hasn't earned it yet. The simple route of throatcutting is not open to him. But he won't get it by shoving the white man around in any fashion; he'll just get us sore at him—and we outnumber him something dreadful. He must either do it the hard way, by commanding our respect—which he doesn't have yet—or emigrate to Liberia.)

Next morning—I went to bed last night (3.15 a.m.) disgusted with myself for having written a long essay rather than letters which urgently need to be written, and with the humane resolution not to trouble you with it but instead to start a new page two and finish off on about page three. However I have now read it and have decided to send it, as you yourself are quite used to writing essays rather than letters and are not daunted by long discussions by mail. But I must add: This item is not intended to persuade you, convince you, nor anything; it has been primarily a means of letting me get my own thoughts verbalized and in order on a subject which has been troubling me a great deal.

To a man of humane instincts there is a great temptation to be uncritically

all-out on the Negroes' side, to support him in anything he asks for. We are aware that the poor bastard starts out with two strikes against him; we feel a strong inclination to want to give him a break. Such have been my feelings—and are my feelings—and such, I gather the impression, are your feelings, too.

But, damn it, more harm is done by uncritical do-goodism than by almost anything else. I find myself opposed to most of the current civil rights drive on several different levels—while painfully aware that to be opposed is to invite identification with the faceless murderers who bombed that church and killed those little girls.[3] It is tempting to be publicly pro everything the Negro wants just to be sure that one is not mistaken for a KuKluxer.

But I am still opposed to most of what they are demanding. On one level, it is no favor at all to the Negro to invite him to think that he can become the equal of the white man in money, in social prestige, in education, or in anything else where he is clearly not equal, simply by passing a law or laws. The result is bound to disappoint him and leave him still more bitter. (For the depth of that bitterness and the hopelessness of it, on both sides, try James Baldwin's *Another Country*—Baldwin hates us as intently as any Black Muslim.)

On another level, I am distressed always at the naive American belief that Utopia can always be achieved by (a) passing a law, or (b) giving money. Both acts are almost always futile, and we as a people are addicted to both.

On still another level, I am always distressed by the mythology that has grown up about "rights" and "freedoms" and the intellectual confusion which has resulted. We now hear of endless "rights"—"the right to strike," "the right to work," "the right to a good education," "freedom from fear," "freedom from want," "the right to decent housing," "the right to happiness," etc., endlessly—you fill out the list. I ran into a brand new one the other day: I had told a young man, a guest in my home, who was sounding off authoritatively on a subject—I told him rather bluntly that he had not been there, did not know what he was talking about, and that if he would shut up and listen he might learn about the matter from someone who *had* been there. (He was a European, not well traveled here, who nevertheless was certain he knew all there was to know about the United States.) He looked at me and said indignantly, "How about a young person's right to theorize?"

Chums, that stumped me. Here was a "right" I had never heard of, yet he seemed to think that it was sacred and unarguable. I had not known that

[3] Heinlein may be referring to a church bombing in Birmingham, Alabama, that killed four teenaged girls on September 15, 1963. This kind of incident was unfortunately common in 1963 and 1964.

youth had a special right in this connection, nor that ignorance was more laudable than knowledge. It may be needless to say that we got nowhere.

Most of the innumerable "rights" one hears of today are of the same high quality. If one could treat them simply as silly guff, perhaps they would not matter. But many or most of them people seriously try to legislate—and almost all of them, if enacted into law, severely abridge some freedom now enjoyed by others. A negative freedom usually, as most of the freedoms we used to enjoy under our constitution and customs were negative in nature; they usually guaranteed us nothing positive but were simply limited to guaranteeing individuals freedom from interference in certain areas. In addition to these negative freedoms there has been (until lately) a notion that runs all through our system, the idea that any laws we do have should be equal in application for everyone—and it has been on this last point that the Negro has had (and sometimes still has) an honest-to-God legitimate beef, especially in the South.

But to understand these pseudo-rights and to see how they conflict with our traditional freedoms it is necessary to examine the abstract ideas of "right" and "freedom."

The most basic concept, and a verifiable truth (not a theory), is this:

There are no natural "rights."

Rephrased, it is a little easier to see: *There are no "rights" in nature.*

Most seem to think otherwise; most people use the term "natural right" without seeing any built-in self contradiction. Really all I can say to such people is: Go out and rassle a bear on a mountainside, and see for yourself what your "natural rights" amount to. I could say it in many thousands of words, but I will not so inflict you.

A prime corollary of the above observable fact is this: "Rights" have no existence other than in the society in which they are found. They exist in the societal structure, as law or custom or belief (frequently all three); they are constructs of a particular society, rules inside the group for the behavior of individuals toward each other; they are agreed-on procedures only and have no existence other than in the minds of men who practice them.

Being such, they vary endlessly, as societies vary. In the USSR a man does have a "right" to employment, he does not have a "right" to free speech. The "Divine right of kings" was taken with dead seriousness only a short time ago—I speak of the Kaiser, not just of James V—and is still taken seriously by many. Obviously, wherever this "right" exists, a lot of notions we regard as "rights" cannot exist. The "right" to "freedom of religion" was anathema

to almost all "right-thinking" people a very short time ago—and freedom of religion does not exist today in much of the world, probably more than half.

Am I saying that there is not such thing as "rights"? Not at all. No society can exist without "rights." "Rights" are simply the rules of a given society, and it is impossible for a society to exist without clearly understood rules. (We are getting all bollixed up at the present time because we are going through a revolution in which the old rules have been weakened or eroded and there is grave disagreement as to what rules, new or old, we shall follow. Let me state my own position by saying that I favor the old rules, in general, and wish to return to them—save that I am opposed to slavery and all of its derivatives.)

I know what "rights" I want this society to follow but I am not able to claim any such high-falutin term as "natural rights" in pushing for my point of view. What I want are clearly expressed negative rules which guarantee each citizen a maximum of personal freedom and a minimum of interference, while clearly accepting that such rules must also constrain me from interfering with the same freedoms of others. I want to do what suits me; I don't want to be shoved around—and I agree that I must not shove other people around. And I concede that I haven't the slightest idea what "God" thinks about this; I claim no higher source for my wants than my own taste, my own desires.

I can't stand on a soap box and shout: "We have a God-given right!" The very most I can honestly say is: "Well, friends, this is how I would *like* things to be run." However, I *can* add: "Although this is merely my personal preference and not accessible to argument, nevertheless my feelings are so strong in the matter that, if things aren't run pretty much this way, I will fight you and if possible kill you in order to have things run more *my* way."

This is exactly what the signers of the Declaration of Independence were saying, but in more flowery language:

"We hold these truths be to be self evident—" (In other words, we ain't a-gonna argue it, Bud. Like it or lump it.)

And—

"—our lives, our fortunes, and our sacred honour." (We are dead serious about this, Jocko; we are in it to the limit and all of us together—and if you don't agree, either you or we will shortly cease breathing.)

Since I can't claim any divine authority or "natural right" in the rules I favor, it behooves me at least to make clear what it is that I favor—since I cannot possibly get the rules I want without your help and that of many millions of others. My chances of shoving my rules down the throats of the

populace unassisted are even poorer than those of Negroes in attempting to press on the white majority rules they don't want. Nil.

I want that negative and relatively free condition defined by the Declaration, the Constitution, the Bill of Rights, and most of the other amendments. (I have grave doubts about the income tax amendment and think it should be drastically limited if not repealed outright; as phrased it is a grant of absolute power.) I think, by my tastes, that the founding fathers were far off base in countenancing chattel slavery and I want all aspects of it weeded out of the rules.

I want *no* rules that do not follow from this idea of negative freedom.

Footnote:[4] Income Tax—I don't mind income tax *per se*; I myself am eating high on the hog, I ain't hurtin'. What I object to is high taxation for any purpose and by any means. Money is power and I don't want government to have all that power. I would like to see government restricted to police, judiciary, and military and I would get rid of those three functions if I could figure out a way to run a society without them. As yet, I have not been able to conceive of a society which did not require the use of force, internally and externally, to maintain itself. I'm still searching, but the political philosophers I have been able to find, whether anarchist, libertarian, or what, who seem to think it can be done all seem to me so far out on cloud nine as to have no connection with the real world of human, fallible people.

If you will examine the various negative freedoms set forth in the Constitution and consider the general rule (of my personal taste) set forth above the boxed footnote, you will see many, many things that I don't like, including why I don't want special rules requiring private owners to sell to anyone against their wills. Such a listing will not bring us into agreement but it will clarify what it is that I want as "rights":

I don't like zoning laws and planning commissions, not any of them. I am not impressed by the argument that I "wouldn't want someone to open a piggery next door to my home." Nobody makes a success of a piggery other than on land so cheap that it isn't much as residential land. Far better a free market.

I am opposed to any and all laws regulating sexual behavior in itself. (Rape is a form of violence, clearly an invasion of another person's equal

[4] This comment between two rules, marked "Footnote" is the way Heinlein handled the material in manuscript—as he designates it, a "boxed footnote."

freedom.) Sex should be no goddam business of the government (the neighbors, collectively).

I am opposed to all laws for censorship, including even the most outrageous of pornography. In general I am opposed to *all* which attempt to regulate the non-violent behavior of people "for their own good." (Libel invades another person's equal freedom, so does driving while drunk—but the free expression of words as such and the free drinking of alcohol as such—using marijuana, heroin, etc., should not be against the rules. So also, all laws re gambling, Sunday closing, etc.—all the do-goodery.)

I do not think the "general welfare" clause justifies social security. Even if it does, from a lawyer's standpoint, I want to see such laws repealed.

[**Editor's Note: Heinlein's letter breaks off here; it is not known whether any more was written and is now lost.**]


GOOD YEAR
FIRST AID

Robert and Virgina Heinlein helping a neighbor child with science homework. Permission the Robert A. and Virgina Heinlein Prize Trust.

LETTER TO JOHN ARWINE ON THE ATOMIC AGE

[A week after the atomic bombs dropped, Heinlein wrote a long memo urging a naval Moon rocket program and resigned his civilian engineer position. He appears also to have laid the framework for a joint government-and-industry rocket program, and on the way back to Los Angeles did research for this program. He needed to keep various colleagues apprised of his findings, so the letters written after the return to Los Angeles are highly repetitive. We have omitted repetitions of the same material in the letters that follow.]

September 15, 1945 To John Arwine

Dear John,

As you can see we are back in Hollywood, although not yet back in our house. However you can send mail from now on to 8777 Lookout Mountain Ave, Hollywood 46. We expect to be back in our house by the time you could answer this. The address is good in any case.

I do hope that you plan to pay us a visit as soon as you get back to this country. I need very badly to have a lot of talk with you. I hope you have held to your resolution, expressed some time ago, to make Hollywood your usual residence rather than Manhattan. Let's keep the apartment on 32nd street, but make Hollywood quite as much your home. There are advantages. Oh hell, you know what they are.

You have expressed my own evaluations and feelings about this war much more clearly and cogently than I can myself. I need your talk and your ideas. I have gone back into politics rather than into writing for market. I am genuinely disturbed and need help.

Not partisan politics. No, I intend to spend as long as necessary beating the drum and passing the word about the atomic bomb and atomics in general, the meaning thereof and what we need to do about it. As I see it, we finally finished off the war by plunging the globe and ourselves in particular into the greatest crisis, the most acute danger, in all history. I am not deploring it. I know that the discovery of atomic power was inevitable and I know that you can't turn the clock back, nor turn sausage back into hog. It is here. We've got to face it and deal with it. I am overwhelmingly

thankful that we got it first and that it was brought out into the open by the war. Now we have a fighting chance to save civilization as we know it and the very globe we stand on. If the axis had gotten it first, we would have had no chance. It might have been a thousand years before freedom and human dignity would ever again have been known.

But I am bitterly afraid of the way we may handle it. There are two crazy approaches to the matter which are beginning to be heard. The first says, "We got it. We'll hang on to it. From now on they got to do what we tell them to." It is the viewpoint of the Chicago *Tribune* and the Denver *Post*. A bill has been introduced to make it a death penalty to reveal anything about atomic weapons. The second crazy viewpoint regards the atomic bomb as just another weapon, powerful but bound to be subjected in time to an effective counter weapon, and that as a matter of fact things haven't changed much and let's get back to normalcy and forget all about war.

There is a third reaction, one of deploring the whole thing, of passing resolutions expressing regret that we every used so barbarous a weapon, apologizing to the poor mistreated Japs, and calling on Congress to do away with the whole thing, tear up the record, make it a lost art, forever prescribed as forbidden knowledge.

You might call these three types of dunderheads the bloody minded, the common or garden unimaginative stupid, and the custard head. God deliver us from all of them. Fortunately there are a lot more who are brave and grave and humble and willing to do whatever may be necessary to insure a lasting peace with freedom. We stopped off at Los Alamos and saw some of the scientists who devised the atomic bomb and were elated to discover that the overwhelming majority were of our viewpoint and had already organized to make their views known and felt. They believe that the secret techniques of atomic weapons must be turned over to an international world authority at once, surrendering whatever sovereignty is necessary, and that this world government must have the authority to poke into every plant, laboratory, mine, factory, etc., on the face of the globe in order to insure that atomics is a complete monopoly of the global government. Then and only then may atomic power be used, under license, for commerce. The Global authority and no other shall have atomic weapons. They believe that and believe that no other possible way is out.

We arrived at the same conclusion independently before we got to Los Alamos. Shucks, I arrived at that opinion in 1940 and expressed it in my story "Solution Unsatisfactory." There is no other way out which will permit

the United States to stay in business. If atomic war ever comes, there will be winners, but it won't be the United States; there will be survivors, but probably not us. If we do not turn the power freely over to a Global Government—*now*, while we are still in the driver's seat—every country on earth will be moving heaven to arrive at the answers independently, or trying to corrupt some part of the several thousand men who know all or most of the key secrets, or both. And they will be successful, probably on both scores. Thereafter, when war comes, as it inevitably must under such a set up, we will be Pearl Harbored but good! We are the logical first target *because* we now have the weapon—and what will be done to us in about twenty minutes some afternoon shouldn't happen to a Jap even! For they won't use the weapon with restraint as we did; the purpose will be to destroy the Colossus of the North with one blow. To do less would be silly—and they can do just that—and they can—and they will.

Unless we pull up our socks and decide to get grown up about it.

A thousand long range rockets, a thousand atomic bombs. Every major city, every major industrial center will be wiped out. Fifty million will be dead. Our power and our transportation will be gone. There will be nothing left but subsistence farmers and a some starving disorganized towns. I regard it as inevitable in the next five to ten years unless we use our special position to insure a Global government capable of policing the whole business.

Most people don't seem to realize that this is not a weapon of defense and that there is literally no defense against it. Oh yes, I know that countermeasures have been discussed but not a scheme has been proposed which can't be shot full of holes.

This is the ultimate power of the universe and nothing can stand against it. How in the world we can plan to intercept and shoot down bomb-carrying rockets, traveling outside the stratosphere at three or four thousand miles an hour, and which may arrive at any time day or night from any direction, is beyond me. Maybe somebody will devise Buck Rogers ray guns, force screens and so forth some day, but right now I see no prospects at all—nor do the theoretical physicists who know most about it. We have twelve thousand miles of soft underbelly spread out for the first little Caesar who comes along to strike a death blow. Once an armament race starts we can't stop it. We got to stop it at the source or we are licked.

It must be remembered that this American nation is temperamentally incapable of attacking without warning. And once the sorry cycle starts over again that is the only sort of attack worth making. Perhaps the country

which destroys us—Sweden or Switzerland or Argentina—will in turn be destroyed the next day by Uruguay or Portugal or China, but that won't do us a damn bit of good. We will be simply a pathetic memory of a dream that did not work because the dreamers were not quite bright enough and not quite generous enough.

Since I came back I have run into one case of that parlor pink custard-headedness concerning which you have written so much to us. It made me sick at my stomach. This gal has done nothing in the war but explained to me that the war was lost before we got into it, that it wasn't worth fighting anyway, that she expected to fight against us in the coming war with Russia (her words, not mine—Russia is just about the only country I feel safe from), that a revolution was coming in this country, not of the people, who were too stupid to know the score, but a resolute band of men who would take over power in the name of the people, that there was no freedom in this country, and that we were headed for the bow-wows in any case.

Shit.

She was not even a communist. She doesn't like Joe Stalin nor the party line. I might define her as an anarchist nihilist bent only on destruction—with about as much chance of achieving it as a moth has of banging a hole in the Empire State Bldg.

I am so damn sick of custard heads and of people who are all filled up with social ideals but won't work a precinct. People who want to fight fascism but have no intention of exposing their own persons, even to a little hard work. God damn their twisted souls!

That's all for now. I think we have a fair chance of riding this tiger to a safe conclusion. We have a lot of people on our side. Even the *Saturday Evening Post* has come out for international control. Jerry Voorhis has introduced a bill to accomplish it and I shall make that my rallying point. I know a lot of scientists, politicians, writers, naval officers, and industrialists, and if one man with a busy typewriter can help, I shall do so.

We can't wait for your return. Thank God you were spared to us. We were almost sure you were gone earlier this year.

All our love,
Bob

Robert A. Heinlein immediately after World War II, when *Rocket Ship Galileo* was written. Permission courtesy of the Robert A. and Virginia Heinlein Prize Trust.

WHY BUY A STONE AXE

(1946)

THE STONE AX was big stuff in Ug's day. It made him boss of the tribe and lord of the cave dwellers. It grew unpopular, not because you could not kill a man with it, but because other weapons were invented against which the stone ax was no defense.

There is a brisk market in stone axes in Washington today. We are being offered, at a cost of several billions of dollars per year and under the excuse of national defense, such items as battleships and other old-fashioned surface vessels, by the Navy, and plans for peacetime conscription for training on the theory that men thus trained could be inducted after the trouble starts, by the Army.

Stone axes—very expensive stone axes.

The most expensive thing in the world is a second-best military establishment. No prizes are offered for taking second place in an armaments race. It would be much cheaper, much safer, and in every way more satisfactory for the United States to disarm completely and unilaterally than for us to make a great show of warlike preparations of a sort not calculated to insure victory when the chips are down.

What constitutes a "stone ax" today and how can you tell it from a modern weapon? To judge the worth of a weapon it is necessary to understand the nature of the Next War, if any. War changed its nature in a split second at Hiroshima; a weapon which was the last word in fantastic new technology twelve months ago may now be, and probably is, completely obsolete.

The Next War will start with the devastation of American cities by surprise attack with atomic weapons launched from thousands of miles away at super-sonic speeds; against such attack we have no effective defense and no real hope of developing a defense.

This is not the author's opinion; this is the summarized opinion of all the experts everywhere. The above statement of the situation may be pieced out from General Marshall's official report on the War; it will be found, in

Never published.

equivalent words, in the public statements of General Arnold and General Spaatz; in much more emphatic words scientists everywhere, especially atomic physicists, have uttered the same warning.

Reread the description of the Next War given above in italics—it should be your yard stick. Unless a weapon or a plan fits such a war, even though it is brand-new, it is worse than a waste of money, for it may lull us into a false sense of security. Battleships are such out-of-date weapons; the very battleships which performed so gallantly and effectively off the coast of Honshu only last summer are now scrap iron from a standpoint of national security. We have aircraft, right now, which can deliver atomic bombs in non-stop flight to the capital cities of any potential enemy on the globe. (See General Spaatz' article in *Collier's*, December 8, 1945.) By comparison, the lumbering speeds and puny blows of battleships are as out-moded as Hannibal's elephants.

Nor is there anything at all a battleship could do to stop such long-range aerial attacks against the United States. A battleship cannot shoot down even an unarmed sport plane unless the pilot condescends to fly within range—how much less an over-the-Pole rocket!

The War Department's conscription-in-peacetime plans are equally anachronistic, unrealistic, and deceptively reassuring. They are not plans for a permanent defense, always on the alert for some new and devastating Pearl Harbor; they are plans to call up a reserve, through draft boards, induction centers, and the like, during the first year after the emergency.

Compatriots, there won't be any first year after the emergency, not in a military sense. The war will be won or lost by the men already under arms at that time and with the weapons they have then. The draft boards of Chicago will not function after they have been atomized; Pittsburgh will ship no steel after the Hiroshima treatment.

("But aren't we going to outlaw the atomic bomb?")

That nostalgic, yearning question crops up wherever national defense is discussed. Possibly Ug felt that the bow and arrow should be "outlawed" when that bright young hopeful, Gug, ended Ug's Stone Ax rule with the first pre-historic aerial attack, a shaft delivered to Ug's ribs from a distance safely beyond the range of a stone ax. Ug may have felt that the arrow was both inhumane and unfair, since it did not require its user to "stand up and fight like a man."

Ug's feeling of indignation at the more efficient weapon seems to be shared by many today, by those persons—you have met them!—who want

not to abolish war, but to abolish atomic weapons, and thereby take us back to the good old days of the flame thrower, the land mine, and the block buster.

In practice, weapons have never been "outlawed" between opposing nations. Even poison gas was not successfully outlawed; it was dropped because it was less efficient, pound for pound of bomber pay load or of shell, than were explosives.

Senator Johnson pointed out that it is just as easy to outlaw war entirely as to outlaw the atomic bomb. There is one way and just one way to outlaw war and with it the atomic bomb. That one way is the method whereby wars are outlawed between Illinois and Ohio—through the existence of a super-state superior to both and capable of forbidding, by force if necessary, war between the individual states.

All sane men everywhere want war to be outlawed. A large proportion are willing to surrender that portion of American sovereignty concerned with armaments and waging war in order to accomplish world peace. They point out that, in the democratic doctrine, basic sovereignty lies in the citizen and not in a particular geographical area, and that such individual sovereignty is no more jeopardized in forming a world state by consent than was the sovereignty of the citizens of the Thirteen Colonies endangered by forming a sovereign federal union.

To others the sovereignty of the United States is sacred and immutable, even in the face of the atom bomb.

We may form a world state, or some other super-sovereign authority armed with the atom bomb and charged with policing and inspecting the globe—or we may not. Many people feel that it is impossible because, they affirm, Russia would never agree to it. Perhaps so, perhaps not, but we will never know what Russia will do until the United States makes her a firm offer. At least as likely as unwillingness on Russia's part is the prospect of a refusal on our own part to help form a super-state. The League of Nations was scuttled in the United States Senate; a world state proposal may receive the same treatment.

If the United States is forced, or chooses, to go it alone, what can we do to protect ourselves in the Atomic Era?

Whatever we do, let us not spend money for stone axes. Except for the obvious though difficult plan of forming a world state, there are only three

rational courses of action possible to us. The first is to conquer the entire world, at once. We have the power while we alone have the atom bomb; we may never have the opportunity again. But we don't have the inclination. Let's forget it. It is not our style.

The second is complete and unilateral disarmament. Whatever its merits or demerits may be this proposal has about as much chance of success in this country at this time as Harry Bridges has of being elected president of the Chamber of Commerce. It could happen but it won't.

The remaining rational possibility is simple to state, hard to carry out: Take whatever measures are necessary to minimize the damage from a surprise attack and to insure that we can strike back hard enough to win.

The only trouble with this simple formula is that, when we hold it up to the yard stick, we find that its inescapable requirements are second only to losing a war in the degree of unpleasantness. The necessary measures are as harsh as those a man must face who finds he must give up his job, sell his home, and lose his car in order to undergo an indispensable operation. In fact, that is just what it is likely to cost you—your job or business, your home, and all such luxuries as automobiles.

There is no middle road here. It is this, or a world state—if the United States is not to lose a war and with it the lives of half her people and the liberties of all. There is no cut-rate way to buy security. If we are to hope to avoid defeat in any World War III we must have the following things:

Dispersion as complete as possible, irrespective of cost, convenience, or civil rights.

The best anti-aircraft we can build plus an all-out research effort to devise better methods.

A continuously alerted air force capable of delivering atomic bombs in annihilating quantities on the cites of any potential enemy or combination of enemies by the latest and fastest means, plus extensive research to keep us from being left behind in weapon or carrier.

A global secret service to ferret out preparations of other nations.

A domestic secret police to insure us against the planting of atomic bombs and to insure the secrets of our own military plans, installations and research. This would necessarily involve the loss of much civil liberty.

Legal and physical changes in the structure of our government, with constitutional amendments as necessary, to insure continuity of administration and of military direction despite the destruction of Washington, D.C., or any other center of government.

A people's army of the whole population, armed and trained in the arts of guerilla warfare and underground resistance, so that, if all else failed, a conqueror could never exploit his conquest. This is the most important measure of all, since our best efforts at defense are not likely to be enough against an intelligently planned surprise attack.

THE COST IS HIGH. It means giving up those new refrigerators, those stream-lined automobiles, those new houses, which we have been promising ourselves all through the war years. It means a sixty-hour week for every one, with the most meager standard of living. It means abolition of labor unions for the working man and abolition of free enterprise for employers. It means conscription for several years for all adults, men and women, and permanent conscription [for] some age groups. It means an internal secret police somewhat like the Gestapo. It means loss of comfort and privacy and the loss of much, perhaps most of our civil liberty.

It may seem outlandish, but don't shake your heads. Look again at the yard stick, the description of what the Next War, if we let it happen, will be like, and remember well that this description is not the wild words of some alarmist but the sober opinion of military expert and scientist.

WE CANNOT DEFEND OUR CITIES!

That is the key fact in the yard stick. Anyone who has followed the discussion in the news is aware by now that science offers no hope of a counter against the atomic bomb, and is aware of the equally significant fact that there is no means in prospect of shooting down the rockets or super-sonic jet planes which will be used to carry it. Since there is no significant difference of opinion among experts on these two points any rational defense scheme must take them into account.

(Oh, yes—it is just possible that science will hit the jackpot and come up with a super-defense, but we cannot pin our chances of national survival on the possibility of a Buck-Rogers miracle. As it stands today, there is no defense and no present hope of one.)

The lack of any active defense for our cites makes the maximum possible dispersion mandatory. Otherwise we must write off half our population and all of our industry against any all-out attack. We might lose them in twenty minutes and with them the war.

But to disperse the cites of America means rebuilding almost completely a structure we have spent generations in creating. It would require a physical

effort more sweeping by far than any Russian Five-Year Plan. Goering's "Guns instead of butter" program was simple and easy by comparison.

You are an insurance broker? You mean you were—from now on you are an apprentice carpenter. You are to move to No Pavement, Nebraska, where you are assigned to help in the construction of communal barracks for Temporary Village No. 13013. Your caravan leaves Spring and High Streets at ten a.m. tomorrow morning. Be prepared to carry two passengers in your car besides yourself and your wife. Please limit yourself to forty pounds of baggage, each.

That is dispersion, citizen, and don't kid yourself that there is any easier way. Your chances of remaining in your present home, under dispersion, are about one in ten. Your chances of choosing your occupation depend entirely on how necessary it is to a nation engaged in an all-out effort to survive. You can't buy this item; you must make it with your own hands—you, and me, and everybody, with no deferments and no exceptions.

It means authoritarian government in its practical applications. Whether or not it can be done without abolishing democratic processes depends on whether or not the American people as a whole are willing to submit peacefully to necessary measures. Or let's put it this way—since we do have democratic processes and propose to hang on to them, come hell or high water, it can only be accomplished if the American people in great majority are aware of the necessity and are willing to submit by common consent to most onerous and repressive emergency measures for a number of years in order to provide for the common defense.

Dispersion alone will not be enough. In the first place it can't be complete; the is no way to disperse such things as power dams, mines, oil fields, or harbors. The dispersion of such things as blast furnaces and steel mills present almost as much of a dilemma. There is an irreducible minimum concentration of population, furthermore, under which mass production techniques become impossible. Cities do not result alone from the desire of the human animal for company; they have necessary economic functions which cannot entirely be dispensed with—all of our methods of distributing and marketing would have to be changed drastically. Nevertheless, some huddling would still exist.

In the second place the most complete dispersion conceivable is not a perfect defense. 45,000 A-bombs dropped in checkerboard pattern would blast every village, every mountain top, every road in the United States. You could not be further away from the nearest blast than five miles—too close! Work it out for yourself, then remember that we dropped many times that number of the comparatively harmless, old fashioned bombs on Germany.

Then why disperse? In order to make it difficult and expensive for the enemy to destroy us. Without dispersion a hundred A-bombs would be more than enough to finish us as a nation. If we are not to have a world state, then we must certainly have dispersion. If we aren't willing to make the effort let's drop the whole matter and order a cartload of stone axes.

As well as dispersion we must have anti-aircraft warning and interception of a split-second, ever-alert variety. We need robot installations in which radar scanners would be hooked automatically through ballistic computers to rocket launchers. The rockets should, of course, be target-seeking types equipped with proximity fuses. We should have them in such numbers as to constitute a wall around the forty-eight states in terms of anti-aircraft coverage and a roof against outer space itself. By such means we could hope to intercept most, but not all!, of the projectiles launched against us.

It is easy to define such a defensive weapon and its construction lies within the foreseeable limits of modern technology, but the description does not tell of the enormous problems of scientific research, of engineering development, and of production which lie between us and its accomplishment. This weapon alone would require much more in funds, effort, and permanent military personnel than our entire pre-War army and navy establishments. But it can be done and it would help to protect us, which battleships and peacetime conscription would not.

However, it would end civil aviation.

The mindless but unsleeping robots would be designed to shoot down anything that moves. Military aviation only, under military secrecy and safeguards, would be all that we could permit. Your dream of a private helicopter, civil air lines, even air mail, all would have to go.

But can't the robots be rigged to ignore such things and act only against such things as high-flying rockets or the speedy jet planes? Certainly they can be—in which case the enemy might be so unsporting as to use vehicles simulating the speeds and altitudes of civilian planes. If we leave a window open, espionage can determine the limits of that window and the enemy can fly through it.

Once there was a consumptive who was willing to give up everything necessary to a cure, except ice skating. He died.

AT LEAST we would not be faced with the necessity of maintaining all the old fashioned weapons, as well. We can dispense with tanks and battleships and amphibious craft and troop-carrying planes and flame throwers. There

has been considerable misunderstanding on this point. It has been suggested that, while we need the new weapons, we still must maintain the old, since a time might come when an all-out amphibious invasion would be necessary to capture rocket-launching sites from which we were being bombarded, just as it was necessary to capture, in hand to hand assault, the sites from which the V-2's were launched at London.

This fallacy arises from a failure to distinguish between pre-Hiroshima and post-Hiroshima conditions. Amphibious invasion is now neither possible nor necessary. Let us omit the dubious but not entirely pertinent question of whether or not a nation undergoing atomic bombardment can make the mighty effort of assembling and loading an amphibious task force and turn our attention to the beach head. If the enemy can reach us across the sea, then surely he can lob atomic bombs on his own beaches. Consider the shambles that a couple of atomic bombs would have made of the Normandy beach head. Let us not speak of sending our young men into such a holocaust.

Nor is it necessary to consider dropping paratroopers directly on the launching sites. If we can reach the enemy site in any manner we can reach it with atomic bombs; there is nothing a regiment of paratroopers can do which cannot be done quicker, cheaper, and better by one plane or rocket armed with one atomic bomb.

Old ways die hard and fighting men love their stone axes. But the day of assault and invasion is over. The new pattern was set at Honshu, where a party of six Americans went peacefully ashore, to arrange for the occupation of a country uninvaded but prostrate.

We would still need attack weapons, but they would not be the usual weapons of this last war. General Arnold and General Spaatz have discussed the probable lines of development in detail. Long-distance rockets armed with atomic war heads and made target seeking through various electronic devices such as radar and television seem one likely course of development. In the meantime our present long distance bombers can deliver atomic bombs non-stop from our own fields to any conceivable target on the globe. Such power reduces every other weapon to the status of a police weapon, unsuited to actual warfare.

Let me repeat that. The long-distance bomber and the atomic bomb have made every other weapon obsolete for war—right now!—today!—not ten years hence. Everything auxiliary to, or necessary to the further development of, these weapons is still useful—such things as radar and electronics

generally, and such arts as rocketry. Every development intended to counter these weapons is important. The rest are stone axes.

Specifically I refer to field artillery, coast artillery, tanks, mechanized field weapons of every sort, all infantry weapons, assault boats, battleships, cruisers, destroyers, naval vessels of every sort, including aircraft carriers. The aircraft carrier is the vulnerable base of the short-range aircraft. It had its glorious day but its day is now over. It takes a carrier three or four days to cross the Atlantic; a B-29 can cross in hours; a rocket can cross it, before long, in minutes.

The weapons listed above have been so far out-classed in attack power as to be useless in attack, and they are of no use in defense against the new weapons. They are stone axes, pure and simple; to continue to spend money on them in the belief that they will be useful in warfare is folly more grandiose than the construction of the Maginot Line. Some few of them should be preserved from rust to be used as police weapons of our occupation forces abroad, now or in the future, or to suppress civil disorder at home. But they are no longer weapons of war and it will be disastrous to think of them as such.

Colonel Beck of Poland made a similar mistake. He thought his Polish cavalry would be useful against Hitler's Panzers. Let us try to avoid the tragic fate of Poland.

An extensive and efficient secret service operation in other countries is a necessary condition to national defense; there is no disagreement here. The point must be emphasized but need not be elaborated.

The necessity for equally extensive counter-espionage at home, more pervasive, more efficient, and more ubiquitously annoying than the Gestapo or NKVD, is not so obvious. It is indispensable for two reasons. If we are to strike back, our own rocket emplacements or other installations must be kept so secret that an enemy could not knock them out on the first attack. The other reason is to prevent an enemy from hiding atomic bombs inside our country, bombs which could be set off by remote radio control at will. An atomic bomb is so small and its power so great that the problem of anti-sabotage assumes colossal proportions.

The necessity of guarding military secrets would mean surrendering the civil liberty of free movement. (Dispersion, you will remember, also invalidated this freedom.) All of us would have to carry identification papers, European style, and the shortest journey would require police clearance,

as in Nazi Germany. The secret police would have to have the power to search and to arrest, at any time and place, on mere suspicion. The right of privacy would disappear.

These things are very distasteful to us, but are inescapable concomittants of rational defense in the Atomic Age. One cannot insist on one's own privacy when one's next door neighbor may be assembling atomic bombs in his rumpus room. Perhaps retention of *Habeas corpus* proceedings would somewhat ameliorate gross injustices; daily annoyance would still obtain.

The rearrangement of the physical structure of our government to make it safe from surprise attack is so complicated as to merit the attention of many experts in constitutional law and political practice; we will limit these notes to a few suggestions. The problem is starkly simple. Washington, D.C., can be wiped out in the first minutes of an attack, with results similar to those attained by chopping off the head of a chicken—we would flounder helplessly in unorganized reflex. We could expect the death of the President and every lawful successor, the deaths of our congressmen and Senators, the deaths of the staff officers who direct all our military operations, and the deaths of the myriad despised but necessary bureaucrats together with the endless records and files necessary to orderly government in peace or war.

Let us not be tolerant of doltish and empty-headed applause from the childish or senile minority who see nothing in our federal government but its shortcomings. This is too tragic and solemn a prospect to be treated other then with the utmost seriousness. An attack on Washington would not only result in the deaths of hundreds of thousands of good men and women, it would be utterly disastrous to the country as a whole. It would reduce us to status of a mob.

Your congressman deserves all the help you can give him in this matter. He has the most dangerous profession on earth; he is beginning to realize, but he may refrain from taking necessary steps for fear of being thought too fond of his own life. In your own interest you must urge him to act without delay.

Some such measures as these may be helpful;

An alternate president, required by law to stay out of Washington, his daily whereabouts a military secret subject to censorship at all times.

Alternate congressmen, on full salary, and required to observe the same precautions.

Secret relocation of our military staffs.

Emergency, secret centers of government in several parts of the country.

Extensive use of modern technology such as microphotography, teletypewriter service, and many others, to provide duplicate government files, kept up-to-date, in each of the emergency centers.

A well-organized disaster procedure.

If all other measures fail, as well they may, if our organization is destroyed by atomic blast and our country overrun by the invader, then comes the last resort in the Atomic Age, of a free people—personal bravery. It is useless before that time, but, after the enemy puts his own troops among us, he is no longer free to use the indiscriminate blast of the atomic bomb and we can then fight back.

We should be prepared to fight back.

You cannot conquer a free man; you can only kill him. From the deathless heroes of the French Underground to our own unyielding Yaqui Indians this fact has been demonstrated again and again. We can so train and arm and prepare our whole people that the conquest of America can be turned into a mockery, too expensive to exploit. The right of the people to keep and bear arms should be encouraged. There should be fire arms in our attics; we should learn how to make dynamite grenades in our kitchens. Our daughters should learn how to knife a sentry, silently; our sons must learn judo, sabotage, and the other arts of the Resistance.

If our grandmothers and our very children can resolve to die, painfully but with sealed lips, then we do indeed have one single weapon superior to the atom bomb!

But it should be organized, planned, and trained for. Our federal government should admit the possibility of its own decease and make plans, like a wise father, for the welfare of its children after it is gone.

Such is the true picture of the United States prepared to attempt its own defense, unassisted, in the atomic era—a nation impoverished save in armament and regimented in almost every detail, stripped of comfort and personal liberty.

Grim as it is, there is sardonic humor in one aspect. That portion of our press most bitterly opposed to a world state bases its opposition on fear of Russia and Russian communism. Yet the picture of the United States dispersed and prepared to defend itself has a haunting familiarity—it is more like communism than any other form of government! Not communism with Marxian dialectic and Party shibboleths, but communism in fact.

I, for one, do not want communism, nor regimentation of any sort. I want democratic freedom and so do you. We don't have to resort to communism, you know. Instead of going it alone, dispersing, and arming ourselves to the teeth, we can retain the atom bomb as a trust for all mankind while we attempt the organization of a world state strong enough to accept it from us as its principal means of enforcing world peace. But, in the mean time, let us not be so foolish as to place our trust in the stone axes of the pre-atomic era!

That way lies only disaster, death, and slavery.

The End

(The opinions or assertions contained herein are private to the writer, a retired Naval officer. They are not to be construed as official, nor as reflecting the views of the Navy Department nor the naval service as a whole.)

NOTES

This is one of the half dozen "worldsaver" articles Heinlein wrote immediately after returning to Los Angeles after World War II. The general agenda for these articles was to nudge the thinking of Mr. and Mrs. America over to the new conditions that the atomic bomb had brought on. If the agenda of John Campbell's brand of science fiction had been to model the speculative possibilities, Heinlein had moved on to education about the technological present modeled by science fiction for the last half-dozen years. "Why Buy a Stone Axe" argues that surface navies and infantry-style armies have become technologically obsolete and that continued investment in old technology is dangerous as well as wasteful. It also proposes a world state as necessary to prevent runaway atomic wars from occurring and tries to use a writer's skill to show what *not* forming the world state would mean, if the United States is to survive as a nation, concluding: ". . . let us not be so foolish as to place our trust in the stone axes of the pre-atomic era! That way lies only disaster, death, and slavery."

None of these articles sold at the time; perhaps Heinlein's presentation of the problem was too urgent for a population rushing back to postwar "normalcy," new refrigerators and two-car garages—an attitude Heinlein thought even more dangerous.

Nevertheless, one slogan from this article has become well-known: "The most expensive thing in the world is a second-best military establishment."

BRAVE NEW WORLD

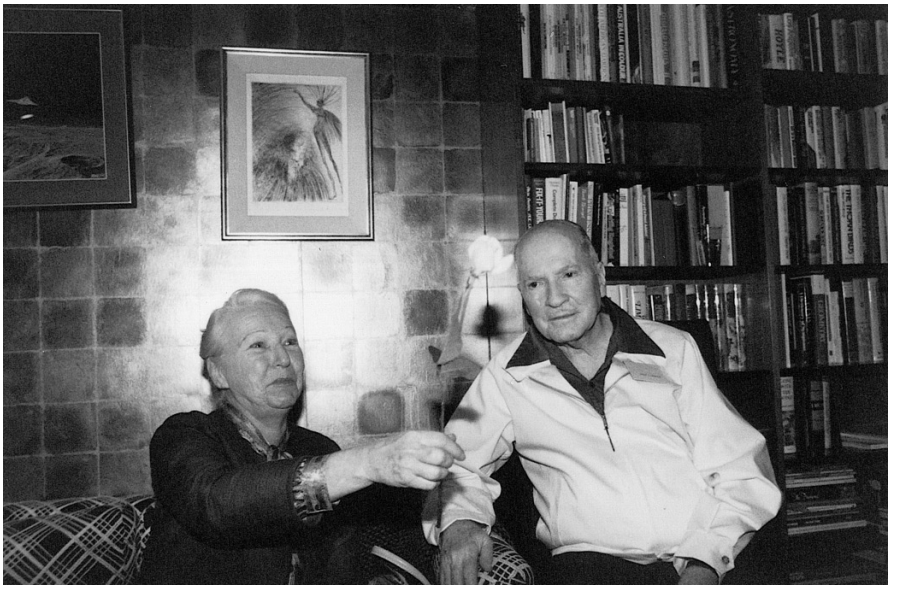
(1946)

Consider, when you're blown to bits
By robot plane and atom bomb,
Opinions of those demi-wits
From Willie Hearst to Good old Mom:
"We're safe behind our oceans here,
From Panama to icy Baffin;
We're save and sovereign, never fear."
Cute? Why, Pal, we'll both die laughin!

Never published.

NOTES

In the months before he wrote "The Green Hills of Earth," Heinlein was on a versifying jag, producing more verse of different kinds than at any other time in his writing career (at least, so far as the surviving documents attest!). Most of his verse wound up in his desk story ideas file, which was categorized with several different indexes. This double quatrain in iambic tetrameter and a simple A-B-A-B rhyme scheme, however, appeared in several letters to friends around the time.



Robert and Ginny Heinlein (with rose) at Larry Niven's home in Tarzana, California for a Citizens Advisory Council meeting in 1983, as *Job* was being written. Permission the Robert A. and Virginia Heinlein Prize Trust.

“All You Zombies—”

2217 TIME ZONE V (EST) 7 Nov 1970 NYC—"Pop's Place": I was polishing a brandy snifter when the Unmarried Mother came in. I noted the time—10.17 P.M. zone five or eastern time November 7th, 1970. Temporal agents always notice time & date; we must.

The Unmarried Mother was a man twenty-five years old, no taller than I am, immature features and a touchy temper. I didn't like his looks—I never had—but he was a lad I was here to recruit, he was my boy. I gave him my best barkeep's smile.

Maybe I'm too critical. He wasn't swish; his nickname came from what he always said when some nosy type asked him his line: "I'm an unmarried mother." If he felt less than murderous he would add: "—at four cents a word. I write confession stories."

If he felt nasty, he would wait for somebody to make something of it. He had a lethal style of in-fighting, like a female cop—one reason I wanted him. Not the only one.

He had a load on and his face showed that he despised people more than usual. Silently I poured a double shot of Old Underwear and left the bottle. He drank, poured another.

I wiped the bar top. "How's the 'Unmarried Mother' racket?"

His fingers tightened on the glass and he seemed about to throw it at me; I felt for the sap under the bar. In temporal manipulation you try to figure everything, but there are so many factors that you never take needless risks.

I saw him relax that tiny amount they teach you to watch for in the Bureau's training school. "Sorry," I said. "Just asking, 'How's business?' Make it 'How's the weather?' "

He looked sour. "Business is okay. I write 'em, they print 'em, I eat."

I poured myself one, leaned toward him. "Matter of fact," I said, "you write a nice stick—I've sampled a few. You have an amazingly sure touch with the woman's angle."

It was a slip I had to risk; he never admitted what pen-names he used.

First published in *The Magazine of Fantasy and Science Fiction* (March 1959); collected in *The Unpleasant Profession of Jonathan Hoag and Other Stories* (Gnome Press, 1959). Source Text: *The Unpleasant Profession of Jonathan Hoag and Other Stories* (Gnome Press, 1959).

But he was boiled enough to pick up only the last. "'Woman's angle!'" he repeated with a snort. "Yeah, I know the woman's angle. I should."

"So?" I said doubtfully. "Sisters?"

"No. You wouldn't believe me if I told you."

"Now, now," I answered mildly, "bartenders and psychiatrists learn that nothing is stranger than the truth. Why, son, if you heard the stories I do—well, you'd make yourself rich. Incredible."

"You don't know what 'incredible' means!"

"So? Nothing astonishes me. I've always heard worse."

He snorted again. "Want to bet the rest of the bottle?"

"I'll bet a full bottle." I placed one on the bar.

"Well—" I signaled my other bartender to handle the trade. We were at the far end, a single-stool space that I kept private by loading the bar top by it with jars of pickled eggs and other clutter. A few were at the other end watching the fights and somebody was playing the juke box—private as a bed where we were. "Okay," he began, "to start with, I'm a bastard."

"No distinction around here," I said.

"I mean it," he snapped. "My parents weren't married."

"Still no distinction," I insisted. "Neither were mine."

"When—" He stopped, gave me the first warm look I ever saw on him. "You mean that?"

"I do. A one-hundred-percent bastard. In fact," I added, "No one in my family ever marries. All bastards."

"Don't try to top me—*you're* married." He pointed at my ring.

"Oh, that." I showed it to him. "It just looks like a wedding ring; I wear it to keep women off." That ring is an antique I bought in 1985 from a fellow operative—he had fetched it from pre-Christian Crete. "The Worm Ouroboros . . . the World Snake that eats its own tail, forever without end. A symbol of the Great Paradox."

He barely glanced at it. "If you're really a bastard, you know how it feels. When I was a little girl—"

"Wups!" I said. "Did I hear you correctly?"

"Who's telling this story? When I was a little girl—Look, ever hear of Christine Jorgenson? Or Roberta Cowell?"

"Uh, sex change cases? You're trying to tell me—"

"Don't interrupt or swelp me, I won't talk. I was a foundling, left at an orphanage in Cleveland in 1945 when I was a month old. When I was a

little girl, I envied kids with parents. Then, when I learned about sex—and, believe me, Pop, you learn fast in an orphanage—"

"I know."

"—I made a solemn vow that any kid of mine would have both a pop and a mom. It kept me 'pure,' quite a feat in that vicinity—I had to learn to fight to manage it. Then I got older and realized I stood darned little chance of getting married—for the same reason I hadn't been adopted." He scowled. "I was horse-faced and buck-toothed, flat-chested and straight-haired."

"You don't look any worse than I do."

"Who cares how a barkeep looks? Or a writer? But people wanting to adopt pick little blue-eyed golden-haired morons. Later on, the boys want bulging breasts, a cute face, and an Oh-you-wonderful-male manner." He shrugged. "I couldn't compete. So I decided to join the W.E.N.C.H.E.S."

"Eh?"

"Women's Emergency National Corps, Hospitality & Entertainment Section, what they now call 'Space Angels'—Auxiliary Nursing Group, Extraterrestrial Legions."

I knew both terms, once I had them chronized. Although we now use still a third name; it's that elite military service corps: Women's Hospitality Order Refortifying & Encouraging Spacemen. Vocabulary shift is the worst hurdle in timejumps—did you know that "service station" once meant a dispensary for petroleum fractions? Once on an assignment in the Churchill Era a woman said to me, "Meet me at the service station next door"—which is *not* what it sounds; a "service station" (then) wouldn't have a bed in it.

He went on: "It was when they first admitted you can't send men into space for months and years and not relieve the tension. You remember how the wowsers screamed?—that improved my chances, volunteers were scarce. A gal had to be respectable, preferably virgin (they liked to train them from scratch), above average mentally, and stable emotionally. But most volunteers were old hookers, or neurotics who would crack up ten days off Earth. So I didn't need looks; if they accepted me, they would fix my buck teeth, put a wave in my hair, teach me to walk and dance and how to listen to a man pleasingly, and everything else—plus training for the prime duties. They would even use plastic surgery if it would help—nothing too good for Our Boys.

"Best yet, they made sure you didn't get pregnant during your enlistment—and you were almost certain to marry at the end of your hitch. Same way today, A.N.G.E.L.S. marry spacers—they talk the language.

"When I was eighteen I was placed as a 'mother's helper.' This family

simply wanted a cheap servant but I didn't mind as I couldn't enlist till I was twenty-one. I did housework and went to night school—pretending to continue my high school typing and shorthand but going to a charm class instead, to better my chances for enlistment.

"Then I met this city slicker with his hundred dollar bills." He scowled. "The no-good actually did have a wad of hundred dollar bills. He showed me one night, told me to help myself.

"But I didn't. I liked him. He was the first man I ever met who was nice to me without trying to take my pants off. I quit night school to see him oftener. It was the happiest time of my life.

"Then one night in the park my pants did come off."

He stopped. I said, "And then?"

"And then *nothing!* I never saw him again. He walked me home and told me he loved me—and kissed me good-night and never came back." He looked grim. "If I could find him, I'd kill him!"

"Well," I sympathized, "I know how you feel. But killing him—just for doing what comes naturally—hmm . . . Did you struggle?"

"Huh? What's that got to do with it?"

"Quite a bit. Maybe he deserves a couple of broken arms for running out on you, but—"

"He deserves worse than that! Wait till you hear. Somehow I kept anyone from suspecting and decided it was all for the best. I hadn't really loved him and probably would never love anybody—and I was more eager to join the W.E.N.C.H.E.S. than ever. I wasn't disqualified, they didn't insist on virgins. I cheered up.

"It wasn't until my skirts got tight that I realized."

"Pregnant?"

"The bastard had me higher 'n a kite! Those skinflints I lived with ignored it as long as I could work—then kicked me out and the orphanage wouldn't take me back. I landed in a charity ward surrounded by other big bellies and trotted bedpans until my time came.

"One night I found myself on an operating table, with a nurse saying, 'Relax. Now breathe deeply.'

"I woke up in bed, numb from the chest down. My surgeon came in. 'How do you feel?' he says cheerfully.

" 'Like a mummy.'

" 'Naturally. You're wrapped like one and full of dope to keep you numb. You'll get well—but a Caesarian isn't a hangnail.'

"'"Caesarian?"' I said. "Doc—*did I lose the baby?*"'

"'Oh, no. Your baby's fine.'

"'Oh. Boy or girl?'

"'A healthy little girl. Five pounds, three ounces.'

"I relaxed. It's something, to have made a baby. I told myself I would go somewhere and tack 'Mrs.' on my name and let the kid think her papa was dead—no orphanage for my kid!

"But the surgeon was talking. 'Tell me, uh—' He avoided my name. '—did you ever think your glandular setup was odd?'

"I said, 'Huh? Of course not. What are you driving at?'

"He hesitated. 'I'll give you this in one dose, then a hypo to let you sleep off your jitters. You'll have 'em.'

"'Why?' I demanded.

"'Ever hear of that Scottish physician who was female until she was thirty-five?—then had surgery and became legally and medically a man? Got married. All okay.'

"'What's that got to do with me?'

"'That's what I'm saying. You're a man.'

"I tried to sit up. *'What?'*

"'Take it easy. When I opened you, I found a mess. I sent for the Chief of Surgery while I got the baby out, then we held a consultation with you on the table—and worked for hours to salvage what we could. You had two full sets of organs, both immature, but with the female set well enough developed that you had a baby. They could never be any use to you again, so we took them out and rearranged things so that you can develop properly as a man.' He put a hand on me. 'Don't worry. You're young, your bones will readjust, we'll watch your glandular balance—and make a fine young man out of you.'

"I started to cry. 'What about my *baby?*'

"'Well, you can't nurse her, you haven't milk enough for a kitten. If I were you, I wouldn't see her—put her up for adoption.'

"'No!'

"He shrugged. 'The choice is yours; you're her mother—well, her parent. But don't worry now; we'll get you well first.'

"Next day they let me see the kid and I saw her daily—trying to get used to her. I had never seen a brand-new baby and had no idea how awful they look—my daughter looked like an orange monkey. My feeling changed to cold determination to do right by her. But four weeks later that didn't mean anything."

"Eh?"

"She was snatched."

" 'Snatched'?"

The Unmarried Mother almost knocked over the bottle we had bet. "Kidnapped—stolen from the hospital nursery!" He breathed hard. "How's that for taking the last thing a man's got to live for?"

"A bad deal," I agreed. "Let's pour you another. No clues?"

"Nothing the police could trace. Somebody came to see her, claimed to be her uncle. While the nurse had her back turned, he walked out with her."

"Description?"

"Just a man, with a face-shaped face, like yours or mine." He frowned. "I think it was the baby's father. The nurse swore it was an older man but he probably used makeup. Who else would swipe my baby? Childless women pull such stunts—but whoever heard of a man doing it?"

"What happened to you then?"

"Eleven more months of that grim place and three operations. In four months I started to grow a beard; before I was out I was shaving regularly . . . and no longer doubted that I was male." He grinned wryly. "I was staring down nurses' necklines."

"Well," I said, "seems to me you came through okay. Here you are, a normal man, making good money, no real troubles. And the life of a female is not an easy one."

He glared at me. "A lot you know about it!"

"So?"

"Ever hear the expression 'a ruined woman'?"

"Mmm, years ago. Doesn't mean much today."

"I was as ruined as a woman can be; that bastard really *ruined* me—I was no longer a woman . . . and I didn't know *how* to be a man."

"Takes getting used to, I suppose."

"You have no idea. I don't mean learning how to dress, or not walking into the wrong rest room; I learned those in the hospital. But how could I *live?* What job could I get? Hell, I couldn't even drive a car. I didn't know a trade; I couldn't do manual labor—too much scar tissue, too tender.

"I hated him for having ruined me for the W.E.N.C.H.E.S., too, but I didn't know how much until I tried to join the Space Corps instead. One look at my belly and I was marked unfit for military service. The medical officer spent time on me just from curiosity; he had read about my case.

"So I changed my name and came to New York. I got by as a fry cook,

then rented a typewriter and set myself up as a public stenographer—what a laugh! In four months I typed four letters and one manuscript. The manuscript was for *Real Life Tales* and a waste of paper, but the goof who wrote it, sold it. Which gave me an idea; I bought a stack of confession magazines and studied them." He looked cynical. "Now you know how I get the authentic woman's angle on an unmarried-mother story . . . through the only version I haven't sold—the true one. Do I win the bottle?"

I pushed it toward him. I was upset myself, but there was work to do. I said, "Son, you still want to lay hands on that so-and-so?"

His eyes lighted up—a feral gleam.

"Hold it!" I said. "You wouldn't kill him?"

He chuckled nastily. "Try me."

"Take it easy. I know more about it than you think I do. I can help you. I know where he is."

He reached across the bar. *"Where is he?"*

I said softly, "Let go my shirt, sonny—or you'll land in the alley and we'll tell the cops you fainted." I showed him the sap.

He let go. "Sorry. But where is he?" He looked at me. "And how do you know so much?"

"All in good time. There are records—hospital records, orphanage records, medical records. The matron of your orphanage was Mrs. Fetherage—right? She was followed by Mrs. Gruenstein—right? Your name, as a girl, was 'Jane' right? And you didn't tell me any of this—right?"

I had him baffled and a bit scared. "What's this? You trying to make trouble for me?"

"No indeed. I've your welfare at heart. I can put this character in your lap. You do to him as you see fit—and I guarantee that you'll get away with it. But I don't think you'll kill him. You'd be nuts to—and you aren't nuts. Not quite."

He brushed it aside. "Cut the noise. *Where is he?"*

I poured him a short one; he was drunk but anger was offsetting it. "Not so fast. I do something for you—you do something for me."

"Uh . . . what?"

"You don't like your work. What would you say to high pay, steady work, unlimited expense account, your own boss on the job, and lots of variety and adventure?"

He stared. "I'd say, 'Get those goddam reindeer off my roof!' Shove it, Pop—there's no such job."

"Okay, put it this way: I hand him to you, you settle with him, then try my job. If it's not all I claim—well, I can't hold you."

He was wavering; the last drink did it. "When d'yuh d'liver 'im?" he said thickly.

"If it's a deal—*right now!"*

He shoved out his hand. "It's a deal!"

I nodded to my assistant to watch both ends, noted the time—2300—started to duck through the gate under the bar—when the juke box blared out: *"I'm My Own Granpaw!"* The service man had orders to load it with old Americana and classics because I couldn't stomach the "music" of 1970, but I hadn't known that tape was in it. I called out, "Shut that off! Give the customer his money back." I added, "Storeroom, back in a moment," and headed there with my Unmarried Mother following.

It was down the passage across from the johns, a steel door to which no one but my day manager and myself had a key; inside was a door to an inner room to which only I had a key. We went there.

He looked blearily around at windowless walls. "Where is 'e?"

"Right away." I opened a case, the only thing in the room; it was a U.S.F.F. Co-ordinates Transformer Field Kit, series 1992, Mod. II—a beauty, no moving parts, weight twenty-three kilos fully charged, and shaped to pass as a suitcase. I had adjusted it precisely earlier that day; all I had to do was to shake out the metal net which limits the transformation field.

Which I did. "Wha's that?" he demanded.

"Time machine," I said and tossed the net over us.

"Hey!" he yelled and stepped back. There is a technique to this; the net has to be thrown so that the subject will instinctively step back *onto* the metal mesh, then you close the net with both of you inside completely—else you might leave shoe soles behind or a piece of foot, or scoop up a slice of floor. But that's all the skill it takes. Some agents con a subject into the net; I tell the truth and use that instant of utter astonishment to flip the switch. Which I did.

1030-V-3 April 1963-Cleveland, Ohio-Apex Bldg.: "Hey!" he repeated. "Take this damn thing off!"

"Sorry," I apologized and did so, stuffed the net into the case, closed it. "You said you wanted to find him."

"But— You said that was a time machine!"

I pointed out a window. "Does that look like November? Or New York?"

While he was gawking at new buds and spring weather, I reopened the case, took out a packet of hundred dollar bills, checked that the numbers and signatures were compatible with 1963. The Temporal Bureau doesn't care how much you spend (it costs nothing) but they don't like unnecessary anachronisms. Too many mistakes and a general court martial will exile you for a year in a nasty period, say 1974 with its strict rationing and forced labor. I never make such mistakes, the money was okay. He turned around and said, "What happened?"

"He's here. Go outside and take him. Here's expense money." I shoved it at him and added, "Settle him, then I'll pick you up."

Hundred dollar bills have a hypnotic effect on a person not used to them. He was thumbing them unbelievingly as I eased him into the hall, locked him out. The next jump was easy, a small shift in era.

1700-V-10 March 1964-Cleveland-Apex Bldg.: There was a notice under the door saying that my lease expired next week; otherwise the room looked as it had a moment before. Outside, trees were bare and snow threatened; I hurried, stopping only for contemporary money and a coat, hat and topcoat I had left there when I leased the room. I hired a car, went to the hospital. It took twenty minutes to bore the nursery attendant to the point where I could swipe the baby without being noticed; we went back to the Apex Building. This dial setting was more involved as the building did not yet exist in 1945. But I had precalculated it.

0100-V-20 Sept 1945-Cleveland-Skyview Motel: Field kit, baby, and I arrived in a motel outside town. Earlier I had registered as "Gregory Johnson, Warren, Ohio," so we arrived in a room with curtains closed, windows locked, and doors bolted, and the floor cleared to allow for waver as the machine hunts. You can get a nasty bruise from a chair where it shouldn't be—not the chair of course, but backlash from the field.

No trouble. Jane was sleeping soundly; I carried her out, put her in a grocery box on the seat of a car I had provided earlier, drove to the orphanage, put her on the steps, drove two blocks to a "service station" (the petroleum products sort) and phoned the orphanage, drove back in time to see them taking the box inside, kept going and abandoned the car near the motel—walked to it and jumped forward to the Apex Building in 1963.

2200-V-24 April 1963-Cleveland-Apex Bldg.: I had cut the time rather fine—temporal accuracy depends on span, except on return to zero. If I

had it right, Jane was discovering, out in the park this balmy spring night, that she wasn't quite as "nice" a girl as she had thought. I grabbed a taxi to the home of those skinflints, had the hackie wait around a corner while I lurked in shadows.

Presently I spotted them down the street, arms around each other. He took her up on the porch and made a long job of kissing her good-night—longer than I had thought. Then she went in and he came down the walk, turned away. I slid into step and hooked an arm in his. "That's all, son," I announced quietly. "I'm back to pick you up."

"You!" He gasped and caught his breath.

"Me. Now you know who *he* is—and after you think it over you'll know who *you* are . . . and if you think hard enough, you'll figure out who the baby is . . . and who *I* am."

He didn't answer, he was badly shaken. It's a shock to have it proved to you that you can't resist seducing yourself. I took him to the Apex Building and we jumped again.

2300-VII-12 Aug 1985-Sub Rockies Base: I woke the duty sergeant, showed my I.D., told the sergeant to bed him down with a happy pill and recruit him in the morning. The sergeant looked sour but rank is rank, regardless of era; he did what I said—thinking, no doubt, that the next time we met he might be the colonel and I the sergeant. Which can happen in our corps. "What name?" he asked.

I wrote it out. He raised his eyebrows. "Like so, eh? *Hmm—"*

"You just do your job, Sergeant." I turned to my companion. "Son, your troubles are over. You're about to start the best job a man ever held—and you'll do well. I *know*."

"But—"

"'But' nothing. Get a night's sleep, then look over the proposition. You'll like it."

"That you will!" agreed the sergeant. "Look at me—born in 1917—still around, still young, still enjoying life." I went back to the jump room, set everything on preselected zero.

2301-V-7 Nov 1970-NYC-"Pop's Place": I came out of the storeroom carrying a fifth of Drambuie to account for the minute I had been gone. My assistant was arguing with the customer who had been playing *"I'm My Own Granpaw!"* I said, "Oh, let him play it, then unplug it." I was very tired.

It's rough, but somebody must do it and it's very hard to recruit anyone in the later years, since the Mistake of 1972. Can you think of a better source than to pick people all fouled up where they are and give them well-paid, interesting (even though dangerous) work in a necessary cause? Everybody knows now why the Fizzle War of 1963 fizzled. The bomb with New York's number on it didn't go off, a hundred other things didn't go as planned—all arranged by the likes of me.

But not the Mistake of '72; that one is not our fault—and can't be undone; there's no paradox to resolve. A thing either is, or it isn't, now and forever amen. But there won't be another like it; an order dated "1992" takes precedence any year.

I closed five minutes early, leaving a letter in the cash register telling my day manager that I was accepting his offer, so see my lawyer as I was leaving on a long vacation. The Bureau might or might not pick up his payments, but they want things left tidy. I went to the room back of the storeroom and forward to 1993.

2200-VII-12 JAN 1993-Sub Rockies Annex-HQ Temporal DOL: I checked in with the duty officer and went to my quarters, intending to sleep for a week. I had fetched the bottle we bet (after all, I won it) and took a drink before I wrote my report. It tasted foul and I wondered why I had ever liked Old Underwear. But it was better than nothing; I don't like to be cold sober, I think too much. But I don't really hit the bottle either; other people have snakes—*I* have people.

I dictated my report: forty recruitments all okayed by the Psych Bureau—counting my own, which I knew would be okayed. I was here, wasn't I? Then I taped a request for assignment to operations; I was sick of recruiting. I dropped both in the slot and headed for bed.

My eye fell on "The By-Laws of Time," over my bed:

Never Do Yesterday What Should Be Done Tomorrow.
If At Last You Do Succeed, Never Try Again.
A Stitch in Time Saves Nine Billion.
A Paradox May be Paradoctored.
It is Earlier When You Think.
Ancestors Are Just People.
Even Jove Nods.

They didn't inspire me the way they had when I was a recruit; thirty subjective-years of time-jumping wears you down. I undressed and when I got down to the hide I looked at my belly. A Caesarian leaves a big scar but I'm so hairy now that I don't notice it unless I look for it.

Then I glanced at the ring on my finger.

The Snake That Eats Its Own Tail, Forever and Ever . . . I *know* where *I* came from—but *where did all you zombies come from?*

I felt a headache coming on, but a headache powder is one thing I do not take. I did once—and you all went away.

So I crawled into bed and whistled out the light.

You aren't really there at all. There isn't anybody but me—Jane—here alone in the dark.

I miss you dreadfully!

NOTES

"It seems to me," Ginny Heinlein commented in 1989 to the biographer both Robert Heinlein and she had selected, Leon Stover, "that Robert had some ambition (which he did not speak of even to me) to do the definitive book in every cranny of the SF genre." "'All You Zombies'" is clearly the definitive circle-in-time story, with the major characters all being the same individual at different points along his/her personal timeline. "It is a gimmick story, pure and simple," Heinlein told Fred Pohl in 1962, "an attempt to exploit the paradoxes of time travel to the limit and thereby finish the subject beyond any possibility that a later story could top it."

In the mid 1950s, Heinlein had a number of requests for stories from the higher-echelon of men's magazines. *Playboy* in March 1957, then *Rogue*.

On July 11, 1958, he wrote the story, six thousand words in one sitting under the title "The World Snake," closing off the story with "The Beginning." Sometime during the writing, he crossed off the title and substituted "'All You Zombies—'" in pencil. Then he brush-pen edited it, blacking out surplusage one word at a time, to tighten up the language—the same kind of precision, pinpoint editing he was to do later on *Stranger In a Strange Land*:

> "A Caesarian leaves a hell of a big scar, and it was still there, but I'm so hairy now that I don't notice it unless I look for it."

became

> "A Caesarian leaves a big scar but I'm so hairy now that I don't notice it unless I look for it."

When he finished, it was closer to 4,500 words—a 25% cut without rewrite or cut in the story, as tight and as pointed as it could be: a simplified, effective, even elegant, working-out of the time travel paradox he had taken more than 20,000 words to do less elegantly in 1941. He was

a much more skilled writer than he had been sixteen years earlier. "I have my fingers crossed for *Playboy*," he told his agent—but if it missed there, it might satisfy *Rogue* or even *Esquire*.

Ray Russell, the Executive Editor of *Playboy*, turned down "All You Zombies—" saying the sex-change aspect of the story made him feel queasy. (Christine Jorgensen's return to the United States in February 1953 had brought gender-reassignment surgery into the public consciousness, but acceptance was still a long way off—and may still be, for that matter.) Russell still wanted something from Heinlein, though, and added that sex-and-seduction weren't necessary for a *Playboy* story.

Rogue and *Esquire* passed on it, too—probably for the same reasons—but the very first submission to a science-fiction magazine, Robert Mills at *The Magazine of Fantasy & Science Fiction*, snapped it up, recognizing immediately a potential classic of the genre.

Heinlein regarded both of his definitive time-travel paradoxes as mere gimmicks—but the readers have disagreed, and they were right: academic critics M. E. Ryder and Peter Stockwell suggest that "By His Bootstraps" and "'All You Zombies—'" are unique examples of what science fiction can do as literature, exploiting transformations in point of view that are possible *only* to science fiction. "'All You Zombies—'" was immediately recognized as the definitive time paradox.

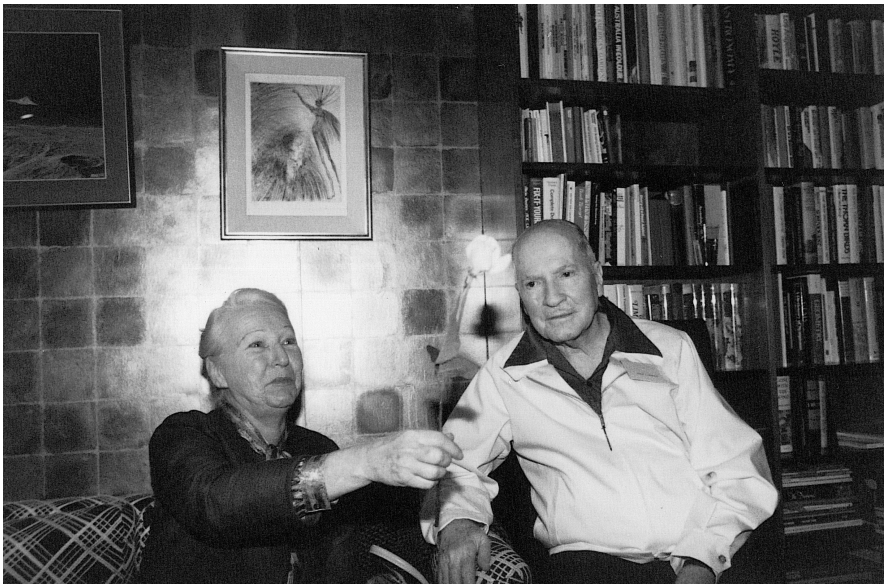
However, Heinlein was not finished with the general subject. Time and the various theories of time travel were a preoccupation going back a very long way with him. And in the late 1970s he returned to the subject with a vengeance, exploring in much more substantial ways the time travel concepts with which he had begun his writing career: *The Number of the Beast* returns to the multiverse concept he had first laid out in "Elsewhen," and all the books he was to write thereafter were set in that multiverse (easily enough done, since the multiverse contained all fictional realities—and all "real" realities that could be). One of them, in particular, *The Cat Who Walks Through Walls* took every fictional time-travel device and threw them all into the pot—cross-time, loop-in-time, branching alternate time tracks, discrete alternate time tracks, all in one, very difficult-to-follow story of Lazarus Long and the other Circle of Ouroboros' Time Corps—

—which is apparently the same Time Corps the Unmarried Mother of "'All You Zombies—'" joins (both the novel and the short story had started out with the same title, "The World Snake," the book becoming first *The Reluctant Knight* then *The Cat Who Walks Through Walls*). While the never-

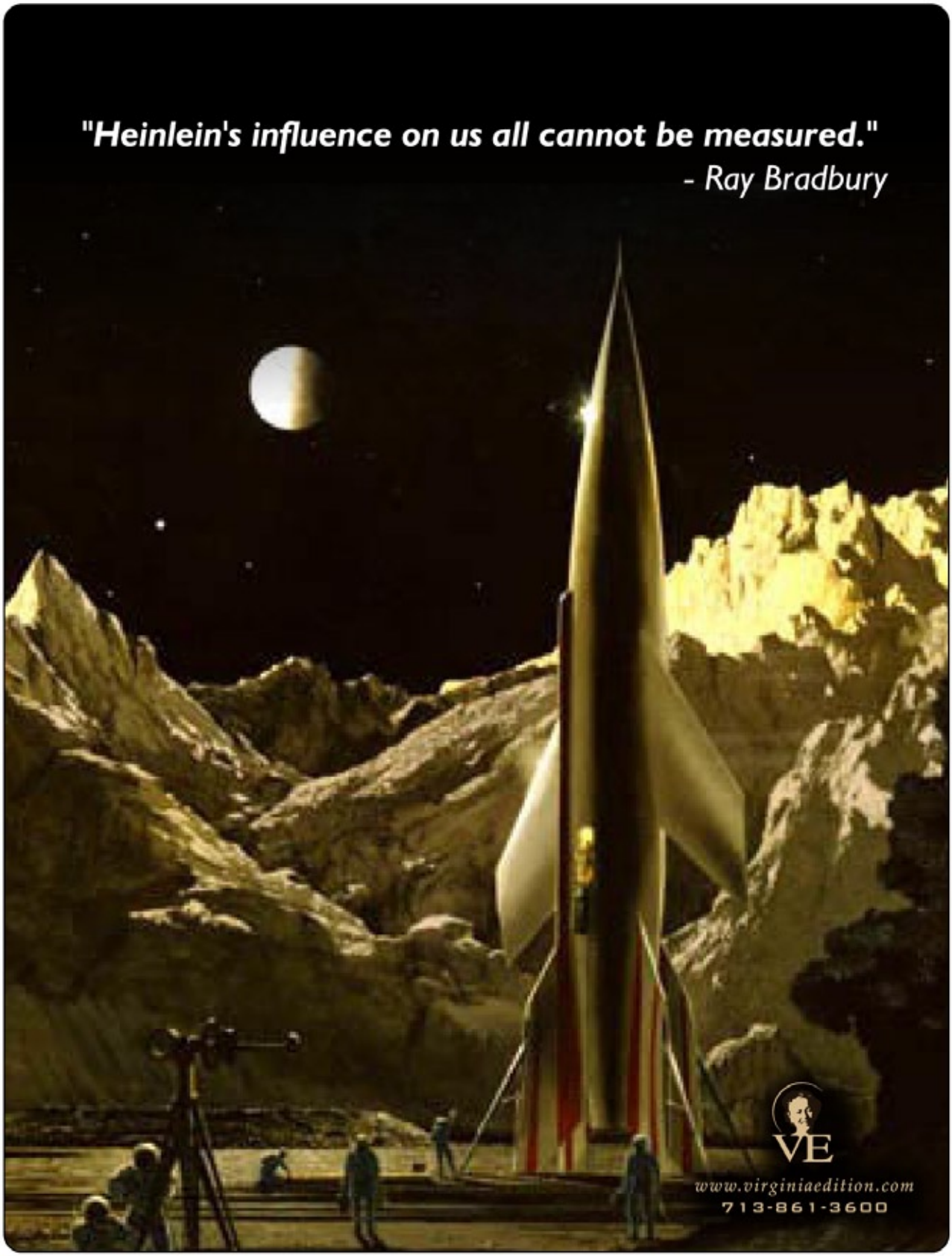
named bartender, who is also a Time Corps agent *and* the "Unmarried Mother," returns to his home base, he reads slogans posted over his bed, "The Laws of Time":

> A Stitch in Time Saves Nine Billion.
> A Paradox May Be Paradoctored.
> Never Put Off to Yesterday What Should Be Done Tomorrow.
> If At Last You Do Succeed, Never Try Again.
> Ancestors Are Just People.
> It's a Wise Father Who Knows His Own Child.
> Even Jove Nods.

And Colin Campbell sees some of these same slogans while waiting at his summons before the Circle of Ouroboros. Just as "They" and possibly "The Unpleasant Profession of Jonathan Hoag" had been brought into *Job: A Comedy of Justice* and "Gulf" into *Friday*, Heinlein brought forth for reconsideration in the largest possible context his last short story, "'All You Zombies—'"



Robert and Ginny Heinlein (with rose) at Larry Niven's home in Tarzana, California for a Citizens Advisory Council meeting in 1983, as *Job* was being written. Permission the Robert A. and Virginia Heinlein Prize Trust.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- Ray Bradbury
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