

John W. Campbell's
Golden Age of Science Fiction



Text Supplement to the DVD

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Preface

This Multimedia Experience

This DVD is a fully self contained multimedia experience, you needn't read another word. But if you do decide to read this text supplement, you will most definitely be supplemented. This "book" of over a hundred pages clarifies, backgrounds, expands, critiques, documents and even suggests questions for further discussion. But first, we want to explain the basic concept behind this DVD.

This is not a movie or even a "documentary", despite our (the producers) considering ourselves documentary filmmakers. In fact, at its center is a documentary called "Lunch with John Campbell", a rather well known and impossible to find (until now) film by James Gunn. Anything that contains a documentary within itself must, of necessity, be something larger than a documentary, and this is.

We offer a multi-dimensional panorama of a man's working life. We present a broad oral history of John W. Campbell, the editor of *Astounding Science Fiction*, by the writers who worked with him, who are, not coincidentally, the fans he reared, and also subjects of this study. We have taken the DVD format and tried to use it to its fullest, presenting more than words - artifacts, evidence and perspective.

Consider this a time capsule, filled with primary source material about an editor who worked from 1937 to 1971, and also his witnesses, looking back from the beginning of the Twenty-first Century. Like a time capsule, it takes you, having examined its contents, to piece together the story.

We have arranged things in a roughly chronological order, and grouped them by topic. We have allowed for a large variety of sympathy and opinion. And we have tried quite hard to avoid presenting a series of conclusions, leaving that up to you.

Campbell was an intelligent and opinionated man with a strong character. Through the force of his efforts, a third rate popular entertainment, pulp science fiction, became literature. Under his guidance, a cadre of prophets and artists, defined the Twentieth Century, and for a brief Golden Age, showed it the way.

-Eric Solstein

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Introduction

Why Prophets Are Not Honored in Retirement

by Katherine MacLean

Henry Bergson, French Philosopher once said, "We do not know our greatest prophets, world shaking thinkers and founders of new religions, because the greatest of them had the misfortune to be understood." An idea once understood fully becomes part of the mind of the listener. He cannot remember what foolish misunderstanding it displaced. He knows that the orator he came to hear had the reputation for greatness. He knows that the oration he heard lifted himself out of himself into a new realm, but he cannot repeat what the idea was that he had felt was glorious. The light had been reflected into his world and revealed things that had been shadowy. Now they were obvious and practical things, part of a world he could deal with, perhaps better than yesterday. He goes through his life with increased certainty and energy and remembers the orator with friendliness as a fine fellow, an inspired speaker, but not brilliant, since he only repeated over and over what one already knew, what every one knew (now!). So our greatest innovators, having kindled the wildfire and watched it spread, live out the rest of their lives as bores repeating the obvious, and are forgotten.

In order to understand the impact of a new idea, one has to be able to remember the ignorance and the wrong ideas that preceded it. We choose not to remember our ignorance. A boy of seven cannot usually remember how it was to think like a child of five; there is a kind of amnesia, perhaps in the shame of having been a fool.

As late as 1950, an expensively tailored man carrying a briefcase, waiting for a bus in Washington D.C. told me he was an assistant to the office of Attorney General, and I told him my profession. He said, "I've always wanted to ask one of you people. You must be faking it. Surely you don't really believe there are planets up there?" He pointed up. I nodded, speechless, wondering how many such successful bright looking people harbored a vast vacancy of space inside their heads.

I am sure that now he does not remember his question, and believes he always knew about planets. Bergson was right. The vast earthquakes in the world view inside people's heads are forgotten immediately. Old science fiction fans go back to reread the old stories, and are disappointed to find simple adventure yarns with a few mistakes of prediction, without the brilliantly novel idea content they remember.

We won't know what we learned, unless we can remember what we believed before we encountered the words that changed us. The tarot card for Insight, is a Tower struck and split open by lightning, and someone in midair falling out of it. We have to reconstruct the Tower of Error out of the rubble of fallen bricks, or find someone who even now does not yet understand, and listen to them until you can see the previous, forgotten world they are still living in.

I know what errors my stories blew apart, because I thought about some general misconception that annoyed me, and carefully constructed a story that would lead readers step by step into seeing a certain general principle as the only way the hero-heroine could save his her life, if he could only grasp it and use it on time.

A man, stuck in low gravity outside a locked spaceship with his oxygen tank running out, can push a two pound rock that would weigh twenty tons on Earth, and it resists the push as if it still weighed twenty tons, moving very slowly then faster a little at a time. He persists with patience. Even at three miles an hour, the rock can hit the side of the space ship slowly and keep pushing with all its tonnage, bend the airlock door open. Mass is not the same as weight.

A woman scientist, after rejuvenating herself sees an eternity of life ahead, if only she can avoid accidents. She becomes psychotically afraid of accidents and cowers in a corner afraid to go out. Her husband understands and lies to her that she has cancer and will surely die in ten or twenty years. Pulling out of her panic, she sees that cancer is from radiation damage, as is mutation, and the cells of one's body being bombarded with a little radiation every day, will be damaged in various ways, not just cancer, but warts and wrinkles and weakness accumulating. Mutation is not just a matter of reproducing a changed progeny, it happens to one's flesh, it explains age. "Somatic mutation" she murmurs, making up a term that had never been said before.

At the time "mutation" meant giving birth to freaks, aliens and geniuses. At that time the blueprint chromosomes were an image from Mendel's logic called gametes and assumed to be only in sperm and ovum. It was not believed that they were in every cell of the body. I assumed they were in every cell of the body, and wrote a story in which someone else's white cells in the blood could invade and take over every part of your body, replace the muscles and organs with tissue containing the DNA of the blood donor and turn one's body into a replica of the original owner of those white cells. I hoped some of the readers were in laboratories, or studying to get there to prove this assumption. Meanwhile, I hoped to avoid blood transfusions until facts had been found. Those stories were published in the early 1950's. They turned out true. Many stories by other writers in the 50's turned out true. Sincere people going back to find out if science fiction predicts anything find only errors. Because they don't notice truths, those are "obvious."

When did certain truths stop being considered ridiculous fantasies believed by nuts, and become "obvious"? When did the world suddenly become round? Learned men always knew it was round and Hindu priests always spoke of planets. Bruno was burned at the stake by the Catholic Church for saying God, enjoying his creations, would not have stopped with just one planet, but filled infinite space with an infinite variety of beautiful planets. That was about 5 centuries before the lawyer at the bus stop in 1954 told me he did not believe anyone could really believe in planets. How many people don't believe in planets now?

And in the genetics laboratory they have abandoned the need for egg and sperm, and propose to clone mammoths back to life from merely using DNA from samples of their dried flesh and hide found in permafrost.

Research is a laborious and lengthy process. No young student would go into a research project until he fully believed it was possible, and he could win fame by proving it. Science fiction was an exploration of the possible, the extremes of power and glory that could be reached by making use of natural law, and knowing what is possible. And the danger from that power in our hands and the cataclysm that could follow that achievement.

Structure and Navigation of the DVD

Overview

This DVD contains a variety of short video modules that may be accessed independently or as one continuous program, as well as a number of special features based on text, still images and video. You access everything through the “Main Menu.” You can always return to the “Main Menu” through your DVD remote, and that’s the case both for set top players and software based computer DVD drives.

Basic Navigation

For an on-screen “button” (that’s what we call any text or graphic that leads to content or a sub-menu) to be pushed, first it must be selected. You can tell which button is selected by its white glow. Once a selected button is pushed, it will change color briefly (so you know it is doing something) while the DVD player reloads.

With a set-top player, one generally moves from button to button in a pre-ordered cycle by the use of the remote control’s arrow keys, hitting “enter” to commence with your selection. A computer is even simpler, just use the mouse to select with one click and commence with a second. We have tried to have the most logical button already selected when you arrive at a new screen, in which case only one more click is required. We have also provided “forward”, “back” and “return to last menu” buttons (featuring an “M” or an arrow bending upwards), where appropriate.

The Shape of this DVD

True fans and Campbell devotees will want to view our “Long Version.” Those not interested in viewing 100+ minutes of JWC in one sitting, are recommended to start with our 20 minute “Short Version”, after which you may turn to whichever topical modules might fit your interest. There will be some repetition of material between this piece and certain modules.

(Cont.)

(The Shape of this DVD, Cont.)

“The Golden Age,” “The Man,” “After The Golden Age,” and “Lunch,” all lead to sub-menus offering a variety of perspectives on these topics. You may select any portion to play, or watch the entire module by pressing the respective sub-menu title. Taken together, these three sections contain the same content as the “Long Version”.

The “Information” button is nestled beneath the Main Menu title, and leads to a sub-menu with three choices: production credits, navigation assistance, and instructions for accessing or updating this text supplement.

If you have found your way to our “Special Features Menu,” you are in for many treats. Here, are seven pieces that do not neatly conform to our oral treatment of Campbell and his legacy. Selection of a listing in this sub-menu will either play a short video, allow one to step through images and text, or take the viewer to another sub-menu. Whenever content consists of text pages to scroll through (such as JWC’s letters and editorial), the "forward" button is always highlighted by default.

Hot Links

We have a few “hot links” sprinkled about. These are web addresses that may be clicked on by users viewing this DVD on a computer. If you have web connectivity and a browser and your computer is configured properly (something we will help you with... somewhat), you should be whisked away to that link’s destination.

When you first attempt to use a hot link, you will be prompted to allow the installation of a very small, and generally innocuous utility. Following the instructions should be quick and painless. You will also be given the opportunity to examine a “read me” file that will give you a much more detailed explanation than this one.

The Shape of this text supplement

We begin this text supplement with a Preface that states the goals of our DVD, and an Introduction, by Katherine MacLean, that opens with the question of context in the appreciation and understanding of those who came before us. Those for whom the name “John W. Campbell” is but a

half-remembered name, are recommended to begin with Ms. MacLean's historiography.

The next four parts make up the body of this supplement and mirror the structure of the DVD. Divided into the same subheadings as in the DVD and constituting chapters within this supplement, each begins with a bit of introductory comment or background materials, followed by a transcription of that sections' video material and finally, questions for further study.

The supplement concludes with Appendices that includes transcripts of relevant special features materials, and adds a number of other useful resources, including a comprehensive glossary for the transcripts (Appendix G). We also include (in Appendix I) critical responses to the video from contributors, and welcome your responses and criticism as well. Reach us at sf@dmznyc.com, as we will attempt to work relevant materials into a future edition of this supplement.

Chapter 1 - Introduction

*This section serves as keynote for the interviews. John W. Campbell offers the viewer a glimpse of his approach to magazine editing. Harry Harrison, who was the editor of both Campbell's **Collected Editorials** and the **Campbell Memorial Anthology**, provides a heartfelt, personal introduction to the DVD.*

CAMPBELL: I wanted it to be a good science fiction magazine. And, oh yes, I wanted to learn how to be an editor. I didn't know a thing about the business when I moved in there.

POHL: He did think of himself as a scientist who happened to be trapped in the body of a science fiction editor.

CAMPBELL: You have to have a sort of an intuition or something to spot the author who is a real writer, who hasn't learned how to write yet - but will.

DELANY: Of course I would've loved to have been, you know, become a Campbell writer - what young science fiction writer wouldn't have?

MALZBERG: Campbell's strength was this: he was the best editor. He was the best editor, in this country, in this century. That's his strength. No one was better.

HARRISON: When I was 12 years old, I thought John Campbell was God. My life revolved around science fiction, and Campbell's Astounding was the only magazine in the world. And one of the greatest pleasures of my life was to grow up reading Astounding - reading all of science fiction of course - and then becoming a writer, and finally meeting God. And I'm happy to say that I was not let down.

John was a fascinating man, had very wry sense of humor - a lot of people didn't know he had a sense of humor, but it was there. And I really loved the magazine. I wouldn't say I loved John, but god, I respected him. And the whole world respected him. And the whole world of course was every technologist, and every engineer, and every spotty little kid in the world who read the magazine.

And when I worked with him we collaborated. I mean, John was not the editor - I've never known an editor like him before. He - I've worked with every - a million editors. I sent him an outline of my first novel, *Death World*, two pages. He wrote back five pages of commentary, mostly consisting of, "Have you thought of doing this and this?" Well, I never thought of doing this and this. Thank you John, thank you very much.

I worked with him - I say, collaborated in a sense that a lot of my books with him were works in which he gave me a lot of material, gave me good material, good input. And before he died, he asked me to edit the magazine. And I was saying, "God forbid, John - when you die, the magazine dies with you." And it was absolutely true. Other editors made a new magazine of it.

The biggest impact on my career was John W. Campbell, Jr.

Discussion Questions:

1. What does an editor do?
2. How does an editor learn their craft?
3. What makes a good editor?
4. Can the type of participation between writer and editor, described by Harrison exist outside of SF? Outside of magazines? Today?
5. Can you characterize the approaches and priorities of other editors, past or present?
6. How do editors exercise control, and over what?
7. How do magazines develop personalities?

Chapter 2 – The Ascent

This section provides a brief backdrop for both JWC and magazine science fiction. Emphasis is placed upon the circumstances by which Campbell arrived at Astounding, and his approach to editing and shaping SF.

Magazine science fiction was a relatively young genre, barely eleven years old when Campbell moved from writing to editing. Science fiction magazines were just another niche to their publishers. The pulps were unashamedly vulgar entertainment, still very popular even as movies could already make imagination almost unnecessary to an even larger audience.

Publishers wanted to make money and could hardly care less about literary values. Early SF mags featured reprints of Poe, Verne, Wells and others, along with the works of professional writers who might otherwise crank out love stories and horse operas. Before Campbell, the SF magazines had inconsistent standards they shared with magazines of sports stories and the like.

Enter Campbell, a writer of science fiction, a fan and believer in the form. A man with more than a personality - an editor with a sensibility.

ASIMOV: 1938 is a watershed in the history of science fiction, perhaps the most important after 1926, when magazine science fiction first began with Gernsback's Amazing.

John W. Campbell, Jr. became editor of Astounding Stories in 1937. It was not, however, until 1938 that the former editor, Mr. F. Orlin Tremaine left, and readers began to discover Campbelleque stories. The kind of stories that John Campbell accepted and published. And this made a great difference.

POHL: He started out as a physics major at MIT, dropped out and went to Duke to finish his education. I don't know what he majored in at Duke. He didn't work at anything scientific - the only job he had that I know of before he began writing was as a car salesman.

And he began writing science fiction and did fairly well at it. And then the job at Astounding opened up, and Tremaine picked him to succeed himself. And why, how Tremaine knew that he would be a good editor, I don't know, because he had no experience at it at all. But it was an inspired choice.

MALZBERG: It would be as if Ursula LeGuin or William Gibson became editor of Analog, but even more dramatic. There weren't that many science fiction writers at the time, and not that many markets. He was THE best science fiction writer who became an editor. He was a major writer. And then he stopped.

DISCH: Campbell had a sense of what a modern adult audience might want to read that could also be science fiction. And indeed, he wrote some of that science fiction himself. The movie "The Thing" is based on his novel *Who Goes There*; and the novel remains superior to the two movies that have been made from it. And they're classics in their way.

GUNN: John Campbell's role was absolutely essential in the development of contemporary science fiction. Because he provided a focus of science fiction on science, and on technology, and on dealing with these in a realistic way - as realistic as he could at the time - that had not existed before. And he was able to catalyze the bringing into science fiction, and presenting them to the world, of a group of science fiction writers who eventually transformed it.

DISCH: It's like BC and AD. In science fiction there's Before Campbell and After Campbell. And it's as clear a dividing line.

ASIMOV: And what he wanted were people who would write stories in which the science was realistic. Not realistic in the sense that they couldn't go out into the blue yonder, not realistic in the sense that they couldn't extrapolate wildly, but realistic in the sense that people who worked in science resembled people who actually worked in science. That scientists acted the way scientists do, that engineers acted the way engineers do - and in short, that the scientific culture be represented accurately.

BOVA: I think he thought of himself partially as a scientist, but more as a philosopher, a man who's looking at the broad picture. He had a degree in science, but he didn't really like organized science. He never worked in the field. He went into writing and publishing.

KLASS: Campbell once said that if you wrote science fiction, what you were saying most of the time was, "Let's suppose this is so and see how much fun we can have with the idea."

FARMER: He had a sense of The Literary. He knew that most of the previous writers of science fiction had been pretty bad, so he went out and recruited people who could write - a new generation - I mean, write well. He'd goof up now and then: if a writer wrote a story about a particular pet theory of his, he wouldn't turn it down no matter how bad it was. But mostly he was a good editor.

KLASS: It was like you had all these disciplines that people studied. And they were interesting and novel in themselves, and they were developing new views of the world and so on - and Campbell took them and made them dance. Made them come alive in Campbell's magazine in terms of the kind of stories that could be written about them. And you never knew in advance what new angle would be pushed.

SAWYER: Campbell had a vision for what science fiction should be. We still use his bromides. He would say, "Give me a creature that thinks as well as a man, but not like a man." And that challenged many writers, including I think, Hal Clement, Larry Niven and others, to really think seriously about what extraterrestrials might be like.

GUNN: During this period, you could say that the four major writers who really more than anybody else fit into the Golden Age was Asimov, Heinlein, Sturgeon, and Van Vogt - and each of them were different. So they sort of represented the different aspects of Campbell's personality, his gestalt, his more than human gestalt.

DISCH: The great writer in Campbell's stable was Heinlein. He discovered Heinlein, and he groomed him to be the writer he would become. And as soon as he had just a little bit of grooming, his stories started to appear in The Saturday Evening Post.

CLUTE: John W. Campbell attempted, through his writers - who were next generation on, to domesticate all of this. To actually put into living stories that particular dream of bronco busting. Robert A. Heinlein is a bronco buster, and he's a very good one. And for 10 or 15 years science fiction really did seem to be riding, riding the world. It did really act as though it was going to be a pattern of stories that predicted, that controlled, that held the reins of the world as it changed.

Discussion Questions:

1. How were published stories different between Campbell and Tremaine? How could Campbell accomplish this?
2. Does an SF writer or editor need to be familiar with science? How familiar?
3. Why would a successful writer quit writing and become an editor?
4. What changes in the world might Campbell have been responding to in his insistence on an accurate representation of science and scientific culture?
6. What the difference between a scientist and a SF writer or editor?
7. What disciplines are considered within Campbellian SF?
8. Give me a creature who thinks like a man but is not a man...try it.
9. "Bronco busting." How did Campbell's SF domesticate SF's dreams? How did SF give the sense that it held the reigns of the changing world?

Chapter 3 - Astounding

In this section, warm reminiscences about Astounding tell much about what JWC brought to the readers of his magazine.

FARMER: Oh, I read Astounding avidly. Of course I'd started out with the Hugo Gernsback pulp magazines. I was pleased with the new approach that Campbell took, and the way he was attracting writers who could write and so forth. I loved the magazine. I read every story that came out.

BOVA: Oh, Astounding was THE magazine when I was a youngster. Astounding paid better - it had better writers, better stories, and had a much stronger base. It was one of the magazines you could find on the newsstand with regularity, which enabled the publishers to support the magazine.

SCHMIDT: Some of the earliest things I remember are seeing the covers on Astoundings that my father bought, and thinking that there must be interesting things behind those, if only I could read them.

ALDISS: When I discovered Astounding, it was an enormous revelation for me. And that was to be preferred to Amazing, or Science Fiction Stories, or the other competing magazines. Now, if you talk to Bob Silverberg, Bob will say the same thing; but he was such a snob, he would only read Astounding. And it was only later he kind of repented, and went and found these other lesser magazines. But it was, there was something about the ethos of Astounding that was more than attractive - that was the holy grail.

SILVERBERG: I'm a science fiction writer. The desire that I had - I said with great emphasis - was an adolescent desire to sell a story to Astounding Science Fiction. That was what drove me when I was in my formative years of adolescence. And it remains.

SCHMIDT: I'm actually a third-generation Astounding reader. Some of the earliest issues that I read, I literally rescued from grandpa's attic. The first time I met John Campbell, I managed to make him grin and grimace simultaneously when I told him this, because he said, "It's good to know that things like that happen, but it makes me feel awfully old." And of course he never got awfully old.

HARRISON: His life was lived for science fiction. That magazine was his entire life. I mean, what else he did - he wasn't much of a - even though he was eating at lunch, didn't drink at all, he smoked those damn cigarettes all the time. But Astounding, Analog, was his life.

SAWYER: His magazine was THE place where reputations were made, where innovation took place, where the genre defined itself. You say, you know, one magazine, one story - how could that be important? If it was in Astounding, everybody saw it, and it changed the world as far as science fiction was concerned.

KLASS: People ask me, why would I say Campbell is my intellectual father, and I realize what my reply has to be. Suppose someone asked a question why was my own father, my real father, my father. I don't know why - he was. I don't know why Campbell is my intellectual father - he was. That's all I can say - he was. Much of what I am, I derived from what I read in his magazine. Much of what I became, I derived from what I read in his magazine. Much of what is me today was conditioned, modified by him in his magazine. Therefore, he was.

SILVERBERG: I was 14 or 15, and I went to a little convention and there he was. He was physically big, domineering, dominating kind of man. So I didn't have much chance to form an impression of Campbell. I read some of his stories, I read his magazine and a year or so later I was in his presence. And I thought, "How awesome! What a titan!" And he was - he was a man, a brilliant man with a powerful sense of what science fiction ought to be - and he demonstrated it month after month in that magazine.

ALDISS: You think I don't understand this? Do you think I'm not interested in Campbell? Of course I am. Yes, because he's a kind of godfather to us, you know. At the most impressionable age, I was reading Astounding - and did I ever in my life read anything more avidly than Astounding? For years on end, I was more faithful to Astounding than I was to any woman. I cannot understand the grip that that had on my adolescent mind.

Discussion Questions:

1. How did Campbell attract new writers?
2. What did it mean to be “the magazine?” What was the “ethos” of Astounding?
3. What media has had equal impact in these days as Astounding did to fans of the 40's and 50's? How did a magazine become so important? Why did it make such a deep impression?

Chapter 4 – The Great Editor

This section consists of authors bearing witness to John W. Campbell's gift for working with writers to create modern SF.

MALZBERG: I think Campbell's contribution is peerless. His contribution to the culture through the medium of science fiction was unduplicable. And I think as a practicing editor, in his ability to procure and shape work and the progenitors of that work, no one was this good. I think he was undeniably a great editor - I think the span of his greatness is short. Campbell was a great editor from 1937 - from his ascension to the editorship of *Astounding*, which was in October of '37 until the publication of the May 1950 issue of *Astounding* with L. Ron Hubbard's article on Dianetics.

POHL: Well, he had what he called his basic philosophy... principle for *Astounding Science Fiction*. He said he wanted to publish stories that could be published in a magazine of the 25th century as contemporary literature - which is to say, you took all the gadgets and the inventions and so on for granted, and you wrote about what the world was like after these things had happened.

CLEMENT: The stories up until then tended to devote a great deal of their time to explaining how the rocketships and ray guns worked. John pointed out firmly - since he was the one who wrote the checks - that "wait a minute, if you are writing a detective story you don't waste wordage explaining how the detective's car or automatic work; you take it for granted. I want a story which could've been written in the 25th century" - which was a very good thing for most of us. We did have this tendency to stop and explain why our peculiar scientific ideas were, after all, feasible.

MALZBERG: So-called literary values had virtually no role in the decisions and functioning of editors, science fiction editors, until Campbell. And Campbell's simple, simplest proposal, which in retrospect seems quite

simple but at the time was advanced, was that a story - it should be a well-written story. It should be a story whose narrative values are, at least aspire to equivalence with the best of fiction being published anywhere.

POHL: He not only encouraged certain writers to write - he fed them ideas. He fed them the kind of ideas he would've written, which were usually pretty good ideas. And he'd often feed the same general idea to four or five different writers and each one would write a story and he'd publish them all - because each one would have a different take on the idea. And he was a writer-oriented editor: spent a lot of time encouraging writers to do what he wanted them to do - sometimes tricking them into it.

BOVA: Basically, it was John Campbell's personality that came through. His editorials, his crotchets, his challenges - I think they were all attempts to stir people to write stories that he could publish.

CLEMENT: He had a certain dislike for intelligent aliens. Apparently that was one reason why Isaac Asimov had only human travelers between the stars. They were either Earth men or descendants of Earth colonies or something like that. I don't know whether I cured him of that with *Needle* or what, but he seemed to have that - I was told he had that prejudice, but somehow it never settled on me.

POHL: When John Campbell wrote an editorial, on the first of the month he would think of an idea - what the subject matter was to be, and then he would discuss it with everybody who came into his office for that month. And at the end of 30 days, he had heard every argument that could be advanced against it and found responses for most of them - so he just sat down and wrote the editorial. And I thought that was a pretty painless way of doing it and I did much of the same.

SCHMIDT: I think if he thought too much of what was being said in public on a subject was too unanimous, he would pick a viewpoint that was not diametrically opposite to it, but maybe 163 degrees away from it, and try to make it sound plausible. So I don't really know what he actually

believed. No, I didn't agree with everything he said, but when I didn't, I enjoyed trying to argue with it.

SILVERBERG: Campbell's editorials were read by everybody in the '40s and '50s. Everybody in the field. And you reacted to them: you reacted against them or reacted toward them; but at least he was providing center of discourse. There is no center now. It's a vast and inchoate field of commercial category fiction - and I mean that in its pejorative sense.

KLASS: When I published my first story in Campbell's magazine, *Alexander the Bait*, I waited for the publication of that story with tremendous eagerness. Not just to see myself in print. - that was something too - but that was not it. I wanted to see what Campbell would do to polish my writing. I wanted to see what editing he would do. And there was absolutely nothing he did. The story's printed exactly the way I wrote it. And one time I mentioned it to him. I told him that I'd been very disappointed there'd been so little editing of my story. And he said, "What was there to edit?" He said, "good syntax all the way through." Nonetheless, he edited me. He edited my mind. He was a damn good editor of my mind.

SILVERBERG: Campbell didn't do any rewriting himself. Campbell would tell you to go and rewrite the story, turn it inside out. He wouldn't touch a word of it. Once he accepted it, he printed it as is.

BOVA: John had established the tradition that the editor read every manuscript that came in. And I continued that tradition, because that's the way you find the good new writers. So there was no first reader, there was no auxiliary reader, there was just the editor. And that meant lots and lots of time. Lots of work reading manuscripts. And as John said late in his career, he says, "I'll bet I read more lousy science fiction than anyone in the history of the world." And he had: he had read every slush pile story that came in for more than 30 years, and discovered now and then an Asimov or a Gordon Dickson or you know, who, what have you.

MALZBERG: Oh, Asimov has an anecdote in which Isaac said to him late in Campbell's life, "Are you sorry that you didn't continue as a writer? Do you miss it?" And Campbell said, "Look, as a writer, I was one writer. But as an editor, I had an Asimov, I had a Heinlein, I had a Kuttner, I had all of these people doing my work - taking my ideas and doing my work. I was, as an editor, I was a hundred writers."

Discussion Questions:

1. How does SF penetrate the culture at large?
2. Do Astounding's stories of the 40's seem as if they were written in the 25th Century?
3. What is a writer oriented editor? What would be the alternative?
4. Why might Campbell have a prejudice against intelligent aliens?
5. What role does an editorial have in shaping the character of a magazine?
6. How might one define the difference between a magazine at the "center of discourse" and a "vast field of inchoate commercial fiction"?
7. Should an editor edit the text?
8. How could writers who profess to have idolized Campbell and Astounding, then instigate changes in the genre that constitute a reaction to Astounding? For example, Barry Malzberg has called Campbell the best modern editor, bar none. After he received the first Campbell Prize for his 1972 novel, *Beyond Apollo*, there was a protest by some who felt Malzberg's work, offensive to Campbell's spirit and legacy. Why were they offended? What might be Malzberg's point of view? What is our responsibility to our influences?

Chapter 5 - A Science Fiction World

Because Campbell was known as a proponent of technology and human conquest, it is fitting to assemble a tribute to that (perceived) stance.

WILLIAMSON: What I think was important about Campbell, really, is that he had a faith in science and a vision of a great possible human future. And I think that underlies his success in creating what is called the "Golden Age."

GUNN: His focus was on the science-important society. And in this society he wanted to show people who were scientists or engineers, or even those people who were impacted by science and technology. And as a consequence, although there were stories that involved heroes like "Doc" Smith's Kimball Kinnison in *Grey Lensman* and the *Lensman* stories - there were a lot more stories about people who were everyday engineers or scientists, or other kinds of people.

BEAR: The best story is what Benford heard from Edward Teller when he was working with Teller. And Benford had a few questions that he wanted to answer for fannish reasons: such as, why FBI agents knocked on John W. Campbell's door in the 1940s and wanted to know what he was up to. And then he found out the source of that, which was that *Astounding Magazine* was being sent to Los Alamos, to the weapons scientists putting things together. They got their subscription copies in the mail. And they'd sit around in the shacks discussing the stories that they had read for relaxation that evening after their day's work. And the FBI agents would be listening in. In 1939 Campbell had put forward a bit of an editorial hidden in the back of the November issue of *Astounding*, in which he said, "Well, now that we've discovered the secrets of fission, and now that there's a war coming up, I just hope we can get through this war without using a nuclear weapon." That was 1939.

That was in the air not just in *Astounding*, but in *The New York Times*. But what Campbell wanted to do, I think, was send a probe out - and he

knew how to do it, because he knew that scientists read his magazine. And so he urged Cleve Cartmill to write a story about fission.

I'm not sure we can prove this now, but I suspect this is what happened. Cartmill wrote a story about fission - Campbell published it - got the probe back. There was something going on. So he knew. He used his magazine and his position in the field to find out that, in fact, the United States had an atomic program going.

ASIMOV: What Campbell had done was to create a science fictional world that was very largely a consensus. Not everybody wrote in the Campbell background. Those who didn't, didn't always write. But the most remarkable stories of the period did create a world of computers, of trips to outer space, of missiles - of a science-important culture. As a matter of fact, the science fictional world of the 1940s was very like, in many respects, the real world of the 1960s. To the point where, to those of us who remember the Golden Age, we are now living in a science fictional world, and one which Campbell's science fiction did significantly succeed in creating.

Discussion Questions:

1. What social and political factors might have led to Campbell's embrace of science and technology as the key to a great possible human future?
2. What might have led Campbell to de-emphasize heroes as opposed to regular people in his stories? Did Campbell yet have a sense of the heroic in his magazine? Compare this sensibility to our current notions of the heroic.
3. What effect did Campbell's emphasis on nuclear physics have on the genre's post war reception? How influential was the genre's point of view on nuclear energy, and its various applications, to the larger world view of these possibilities?
4. What was the "Campbell background"? How did the science fictional world of the 1940's resemble the real world of the 1960's, or the year 2000?

Chapter 6 – The Man

This section contains remembrances of, and feelings about, John W. Campbell. He worked long hours, commuting back and forth from his home in New Jersey to his office in Manhattan. He was an amateur photographer with a home darkroom. He was a ham radio operator, with a set in his basement. He was married with three daughters, eventually divorcing Donna and marrying Margaret, the ex of writer George O. Smith. Most of those closest to him are gone and his daughters are not actively involved in their father's legacy. We have gotten the impression that his very public interests also dominated much of his private life.

It is a difficult task to uncover the private JWC.

WILLIAMSON: Campbell was often regarded as a dictator. But I felt on pretty casual terms with Campbell. He was friendly when I knew him. It was - a weekend with him was a rather tiring experience, because he talked continually - a flow of new ideas, or his own ideas, or whatever. But when I had something to write that appealed to him, he would buy it and publish it, which was wonderful.

HARRISON: Writers never stop writing. The whole world is input. And with John W. Campbell, that input was high-pressure - the hose is on you every moment of the time. You were very glad to get out from under it, and go out and go home and quietly, and write.

It was very stimulating. And in the back of your head, always the thought that, not that John was God, but maybe the best game in town. And when you worked with him, you were going to write better stories - you can say for better money. He paid 3 cents a word which was great in those days. And this was where the real action lay.

KLASS: Campbell seemed to fill a room when you spoke to him. He was an enormous and powerful personality. And when you spoke to him, as the moments went by, he grew larger and larger. And the room got filled with him. And Ted [Theodore Sturgeon] said the only other person who had

that quality was Heinlein, or "is Heinlein", Ted said at the time. He said, "Heinlein also fills the room when you speak to him." He said, "When you get Campbell and Heinlein in one room, there's really no room for you."

PATTERSON: Now, John Campbell was known to dash off 8- to 10-page single-spaced letters, without thinking, to people. His letters to Heinlein were often 25 to 30 pages. And Heinlein would do the same thing, while in the middle of while he's doing this, you know, 100,000-words of story during this month. So they just clicked in 19, well, I'd say probably not by 1939, but by 1940 they had just clicked as two people ever could.

SILVERBERG: He just wasn't good with people. And when you walked into his office - his tiny, cluttered office - he'd say, "Hello, Bob", and then immediately, "I've been thinking about the problem of slavery." And off you'd go into some kind of crazy Socratic dialogue. No small talk. He was a man totally without small talk.

KLASS: I think Campbell was my intellectual father; and I admired him, but as I got close to him, I got to know the man. And the man was not, how shall I say, the groupie picture of him that I had developed. And I had been of course a Campbell, you might say a Campbell groupie, from reading the magazine and from admiring his editorials.

And then of course once I met him, I began reading his editorials with a slightly different understanding, because I began seeing the things in them that I didn't like, that I didn't relate to, that I didn't understand, that were not part of my cosmogony. And god knows there were an awful lot of them. Campbell was very glib. When he believed in something, he believed in it absolutely. He never thought of a qualification. I've always thought of qualifications. I've always thought of overtones, nuances. And Campbell had almost no nuances whatsoever.

BOVA: When I wrote a letter criticizing a story in the magazine, and got like three days later a letter back, five-page letter, which began, "Ok, wise guy", and dared me to write a better story. And offered five pages of story ideas. "You know, you think you're so smart, why don't you do something about this?"

And that's when I first became aware of Campbell's personality. John was marvelously sensitive to new writers. In fact, he once said, "You know, the real function of an editor is to find good writers in bad stories. To find a good writer in his first fumbling attempts, and bring the talent out, and help that writer to succeed." And this, he spent a lifetime doing. 30-some years, as editor of *Astounding* and then *Analog*.

STERLING: You hang around MIT, I don't think you have any problem finding John W. Campbell figures. I mean, any MIT undergraduate talks a lot like John Campbell in a lot of ways. It's like, "No, wait a minute, I've got the real solution, man! You do this, you do that and then you wire up this and you wire up that." You know, everything to them is, you know, it's all about rewiring the model railroad. They don't want to hear anything else or, you know, approach anything else.

SILVERBERG: The man was very shy beneath it all. This booming Lyndon Johnson figure. Had a great deal of difficulty, I think, in ordinary human relations. But it didn't matter because he had his persona to hide behind.

Discussion Questions:

1. Was Campbell a dictator? To whom (and how) did Campbell dictate?
2. What type of person was Campbell? Can his personality help explain his transition from writer to editor?
3. You are a writer who has submitted a short story to a magazine. Two weeks pass, and you receive in the mail a six page letter full of criticism, entirely unique alternative approaches and a raft of completely new story ideas; how do you feel? How do you respond?
4. Campbell quickly established a strong rapport and voluminous correspondence with Robert A. Heinlein, but after just a few years, their relationship and communications cooled significantly. Consider exploring this relationship.
5. Would you characterize Campbell as narrowly focused or perhaps broadly skeptical? Did his focus and approach serve the magazine's interests?

Chapter 7 – Encounters with Campbell

Apparently, Campbell made an impression on everyone he met. Are man and magazine divisible?

POHL: In the late '30s, early '40s, I had begun trying to sell stories to John - and I'd sold him a few collaborations with other people. And I took Cyril Kornbluth up to meet him, because I figured Cyril was a writer that John should publish - and ultimately he did, quite a lot. And Cyril was absolutely horrible to him. I mean, he treated him with contempt and was not interested, showed that he was not interested in anything John had to say and was just discourteous. And when we got outside, I said, "Cyril, what the hell were you doing?" And he said, "I just wanted to make sure he remembered me." And I think that a lot of people in that audience with John pushed themselves in ways that led to an unpleasant situation. I don't think John created it. He did think highly of himself. He did think that he had all the answers there were. And he did think that most people would not understand much of what he knew.

KLASS: I was now going to meet Campbell, my intellectual father, as on an editor-author basis - as a professional. And I was going to meet the man who had terribly excited my mind, in - with his editorials and with his editing and with his, the direction he gave the magazine. It was, I think, as I thought of it, it was going to be perhaps the biggest moment of my life.

SILVERBERG: Suddenly I'm sitting opposite of him - "Here's my new story, John." Fully aware of the chasms opening beneath my feet, but everybody called him John - he expected me to do it. The first time I sold him a story, I was so excited at the thought of having sold a story to John Campbell - I'd sold some stories before this, but now I've sold one to Campbell. I couldn't sleep all night, just revolving that notion. Because to me he was the editor and everybody else were pretenders, imitation editors. That was the real thing. That was the magazine where Heinlein's *Future History* stories had appeared, and where the *Foundation* stories had

appeared, and all that Kuttner and Leiber and Kornbluth's "Little Black Bag", and on and on and on and on. And now I was getting in there. Well, within five years of that day, he had so invalidated himself in my eyes as an editor - not retroactively invalidated himself: I still respected his great accomplishment as an editor, and I still do. But the current John Campbell seemed so silly, dogmatic, rigid, opinionated, that I couldn't bear to do business with him anymore. So I went through that whole evolution between, say, 1950 and 1960.

HARRISON: I didn't leave John Campbell's stable, physically, until I had an idea for a book I really wanted to do - my army novel called *Bill the Galactic Hero*. And John didn't know it existed. And I sold it to books, but I never submitted it straight to him. I'd sold the serial rights to other magazines. And I went to New York a year later and he said to me, "Why did you write *Bill the Galactic Hero*?" I said, "How did you know I wrote *Bill the Galactic Hero*?" "I was going home on the tubes, and I saw a copy, and I bought it." Here's a guy who read every story ever written, unsold, slush pile - he actually bought a book of mine, and read it, and disliked it. I said, "Christ, John, I knew you were going to dislike it - that's why I never sent it to you." And he gave me a quick lecture on what was wrong with it. I said, "Thank you, John, you're absolutely right, of course."

BOVA: I met John the first time at a science fiction convention. We were standing in line to register at the hotel and I recognized him and I introduced myself. And he said - and I think I had published one or two stories by then. And he said, "Oh, you're Ben Bova." He says, "This is 1963." He said, "No democracy has lasted more than 50 years, so it's obvious this is the last year of American democracy." And I said, "50 years ago was 1913." I said, "Oh, you're talking about when the constitution was changed so that United States senators could be elected by the people in their states, rather than appointed by the state legislature?" He said, "You're only the third man I've ever met who knew that!" And we were pals. John was like that: he liked to challenge you, liked to give you puzzles and see how you reacted. He was a great teacher.

SCHMIDT: I walked in and his first words were, "Hi, glad to meet you. My secretary and I were just discussing the English language. There are, in the English language, two forms of the present tense: the 'I go' form and the

'I am going' form. You always know which to use in any situation. But do you know what rule you're applying when you decide which one to use?" And I thought, I said, "Well, I haven't really thought about it, but it seems to me that the 'I go' form is what you use for something that you do sometimes or occasionally but - or habitually - but not necessarily right now. And 'I am going' you use if you're doing it right as you speak." And he said, "Ah, I am seeing what you mean." This was the kind of thing that John loved to do. Where he would lead you through a line of logic to a conclusion, and then immediately ask another question or say, make another statement that showed that you had just contradicted something else that you believed.

WILLIAMSON: Individually, he was proud of being a Scotsman. He was big and sort of barrel-chested, and smoking cigarettes in a long holder.

CLEMENT: Large, heavy, marine-type or almost marine-type very brush haircut, piercing blue eyes, continuous smoker - which seems to be what eventually killed him. A conversation I remember at that same convention in '68, some young fellow came up, got into the conversation with us, mentioned that he had been doing some writing. John asked him, "Well, have you sent it in? I don't remember seeing anything with your name." And he said, "Ah, no, it's not really any good. It's in the closet at home." And John pulled himself up to his full height, spread out his shoulders to full gorilla span, transfixed the poor kid with his glittering blue eye, and said, "And who hired you to reject manuscripts for me?"

Discussion Questions:

1. Why were meetings with Campbell so portentous?
2. Were people responding to Campbell as an individual, to his reputation or to his editorship and position?
3. Was he a great teacher? What were his "teaching" methods and what do you think of them?

Chapter 8 - A Changing World (Social Issues)

Phil Klass has said that "When Campbell believed something, he believed it absolutely." Obviously then, his opinions also made a strong impression.

DELANY: There was one incident involving a novel I wrote called *Nova* which was rejected by John W. Campbell because the main character was Black. And he was very straightforward, that's why he was not going to publish it. He said other than that, he rather liked it.

SCHMIDT: I think he was reluctant to have Black protagonists. I don't know how much of this was his personal belief and how much was his perception of the social climate at the time. Which - it may have been true that the readers would've boycotted the magazine if he had a Black hero on the cover.

MOORCOCK: The man was an out-and-out fascist. I mean, he was a straightforward, old-fashioned American fascist, you know, pre-war fascist as it were, in that he believed that blacks should be re-enslaved. This is the truth. At the time of Watts, when I was on a panel with him, he got - and I didn't think he could go this far - he said, "You know, the reason the Black people are rioting is because they're unhappy, because they would rather be slaves." And he believed that.

BOVA: John, at one point, said, "The only person who makes slavery possible is the slave." That you always had the option to, you know, go out and die, if you feel slavery is so terrible. But again, I think he was challenging the readers and the writers to look at things from a different direction. I frankly don't know what John really believed about slavery. But he would argue you deaf, dumb, and blind until you generated a story. And a lot of those stories were generated to disprove what John was saying.

STERLING: I think people do feel the loss of a kind of 'man on horseback' intellectual figure. There has never been another editor of his stature who would sort of come in and say, "Alright, you guys are going to do it my way - and here is like a series of things we're going to write about: robots, psi, space travel. And here's a bunch of stuff we're not going to write about: women, black people, drugs."

KLASS: The one thing you couldn't have in a Campbell magazine was sex. He had this editor Catherine Tarrant - his assistant editor was Catherine Tarrant. And it was her job to find anything in a story that might possibly be considered exciting sexually, or interesting sexually. It was her job to find it and remove it. And, therefore, the story among science fiction writers in those days was, "It cannot be too errant for Tarrant."

GUNN: Campbell had some other kind of strange notions. Like he thought that his readers wanted names that were Scottish in origin for their authors. And so he sort of - he asked some of his writers that were Jewish to use pseudonyms.

POHL: He never got Isaac Asimov to change his name, because Isaac was first published in another magazine, not in Astounding. Otherwise, I think, Isaac would've been published as Leonard Mac Isaacs or something like that. This was not because John was an anti-Semite in any overt way - it was just because he thought it was too bad these people had the misfortune to be Jewish. He didn't hate them for it - he was just sorry for them. And I think that that describes his feelings about race.

MALZBERG: He was an anti-Semite in the general, and never in the particular. The individual Jew, the Asimov, individual Jews were fine and judged ad hoc. He - there was a kind of generalized racism and anti-Semitism, yes.

KLASS: It was going to be THE big meeting between the great man - the great editor - and me. And it was a very important thing for me. And we went down to lunch, Campbell and I - and I was absolutely exhilarated. We went to a restaurant. And I was wearing in my lapel the - a sort of peculiar

little eagle pin, with an eagle on it that - the device that the army gave out to those discharged veterans. We called it the "ruptured duck." And as we were sitting down in the restaurant, Campbell pointed to it and asked me where I had served. And I told him I'd been in the army. I told him the places I'd been - England, France, Germany, Belgium. And he asked me if I'd seen a concentration camp, which - there were - the newspapers were then full of the concentration camps being discovered, and all the horrors of the concentration camps. And I told him that I had visited one a few days, about a week after its liberation. And he asked me to tell him - tell him, tell him about it. What had I seen, what was it like?

So I started to talk about it. And I described the rows of bodies. I described the gas ovens. The crematoria that were now gone cold because they were not in use. But the bodies piled everywhere. Bodies upon bodies upon bodies. Mostly Jews. I don't remember what I said, but I do remember that I went on and on about it. It was very much in my mind.

And Campbell was very much impressed and was obviously looking for something to say to me that would show he understood. And as we sat down finally, just before we ordered, he put his hand out on mine across the table and said, "Phil, I want you to know something I've always believed." And I said, "What's that?" And he said, "I've always believed the Jews are homo superior." And I told him I wish he hadn't said that. And he said, "Why?" And I said, "Because it's racism. And at the moment I don't want to hear any - I can't live with any kind of racist formulation." And he said, "You didn't understand me: I said 'superior' - 'homo superior'."

And I tried to tell him that whether you take racism by the top or the bottom, it's still racism. And he didn't understand. I told him that he made me smell the gas ovens again, he made me see the bodies again. And it was a very unpleasant lunch. He was baffled by me. And I was deeply angry over this business of separating human beings into compartments and saying one was superior or inferior to another, because as far as I was concerned it was the same thing.

Years later he used to tell this story to people who came to the office, and he would say, "The man didn't hear the prefix. I said 'superior' - 'superior'. He didn't hear the prefix." And Campbell could never understand that it wasn't a matter of the prefix - it was a matter of racism.

WILLIAMSON: John Campbell had his own sensibilities and prejudices and approaches. And you need to keep in mind that science fiction is

written by people, and edited by people, and of course written for people of the day. So it reflects personalities and the contemporary culture and current interests and whatever in very complicated ways.

Discussion Questions:

1. How was Campbell a creature of his time and place? In what ways may he be regarded as timeless?
2. Are Michael Moorcock's opinions on Campbell fair? Relevant?
3. What was Campbell's argumentative methodology? What were his arguments regarding slavery? We suggest you examine additional letters and editorials.
4. Can one find common threads in Campbell's perspectives on race and human achievement?
5. Analyze the cognitive dissonance between Campbell and Tenn (Klass)?
6. Can one find a common thread among Campbell's opinions? Does he have antecedents for his points of view? Have his opinions had any continuing impact on today's culture?

Chapter 9 – Introduction to the Film, *Lunch With John W. Campbell, Jr.*

Mr. Harrison, one of the participants in the film that follows this section, sets the stage (so to speak) by giving the background and circumstances of the film's creation.

HARRISON: I was living in California, going to New York to see John Campbell, mainly. And Jim Gunn came up to lecture my class in science fiction I was doing in university there. And he'd mentioned he was doing these home training films for his students in Kansas, and interviews with science fiction people. And I said, "Whatever you do, you've got to do lunch with John Campbell - this is where all the creation of - his interplay, interface with the writers takes place at lunch." He said, "Well," in his good Kansas accent, "Well Harry, if I do it, YOU do it." "Oh Christ, I'll do it."

So I was working with Gordie Dickson - very close friend. And he mentioned to me - he was in New York at the same time I was, and Jim was there. We'd all arrived. And he, Gordie, said, "You know, Harry, I've always thought there was a science fiction novel in the film *Lifeboat*." I said, "Say no more, Gordie, say no more. Let's expose it to John Campbell and film, and see if we can invent a book on camera. And how it would relate to John's work with writers." Great. Went to lunch.

And University of Kansas had a very amateurish crew there - maybe you'll see some of those shots: flat lighting, wiped out everything. And of course there are two cameras: one on the guy speaking, one dollied back. One camera went out just as we started talking - which I think in a way improved the film. I mean, this is a sort of thing you get at the University of Kansas (he said, being a New Yorker).

And John - we - Gordie and I, sort of developed the idea. And we said, "This is a good idea, John!" And John would say, "No." And our spines were bending, we'd say, "You're right, John, of course. You can't develop it that way." And we started to sweat. And John would - I wouldn't say negative input but he was queering everything we did.

Then the damn camera was always on the wrong person. John is saying something - going on - expatiating on something very important, and not drinking of course. And Gordie and I had double whiskies. And the camera is always on me and Gordie knocking it back, when the camera should be on John. So it's - I think of it as one of the funniest films ever made. And, but we did do on camera - invented this damn novel, got the structure set. And in fact, it works around intelligent aliens who were smarter than human beings - which is one in the eye for people who say that John always thought that human beings were the only source of intelligence in the galaxy.

And I don't know if we had written it or not, but a few months later John died. And Gordie and I felt that well, at least we owed it to him to write this damn novel. And we did. And it was published by Ben Bova, the editor by that time. As a training film for writers and editors, I wouldn't recommend it. But as a bit of hysteria, I would.

Chapter 10

Lunch With John Campbell, Jr.:

An Editor at Work

by James Gunn

Gordon R. Dickson in the 1950's onward and Harry Harrison from the 1960's, were important members of the Campbell stable, both near there creative peaks at the time of filming...Campbell was (unknowingly) close to the end of his thirty-odd year career. Though no longer at the height of his influence, this film presents the only opportunity to see JWC in action with authors - to hear his voice and feel his commanding presence as the ideas bounce back and forth.

“Lunch” is part of a series of films exploring the genre, James Gunn created through his Center for Science Fiction Studies at the University of Kansas.

GUNN: John, you were appointed editor of Astounding in 1937. What were your thoughts at the time, can you remember?

CAMPBELL: Well, basically I was glad to get the job. And I'd been writing for the magazine; I liked the magazine; and it looked like a fine opportunity to have more fun with my favorite hobby - science fiction.

GUNN: How did it turn out?

CAMPBELL: It's been fun. [G laughs] I've had a lot of fun with it. And I'm still having fun with it.

GUNN: Did you have any plan in mind as to what you wanted Astounding to be?

CAMPBELL: No specific plan. I wanted it to be a good science fiction magazine. And, oh yes, I wanted to learn how to be an editor. I didn't know a thing about the business when I moved in there.

GUNN: What did you learn?

CAMPBELL: Well, I tell you, about three weeks after I got in there, I went to the editor-in-chief - it was Street & Smith at the time and said, "What does an editor do if he doesn't get enough manuscripts to fill the magazine?" The old fellow took a look at me and says, "An editor does." End of conversation.

What I learned was that an editor does. He gets enough manuscripts. And if he doesn't, he gets, sits down and does some awful fast writing himself.

GUNN: Speaking of the errors, what errors did you learn most from?

CAMPBELL: Not to give impecunious authors an advance. That was one of the things I learned very early. Another was that you have to have a sort of an intuition or something to spot the author who is a real writer who hasn't learned how to write yet - but will.

GUNN: Did you find a lot of these in science fiction in particular? Did you think science fiction breeds this kind of writer?

CAMPBELL: I think all forms of writing are dependent on just that. The young authors - and that doesn't mean young in the years, it means young in experience writing - who have the talent but don't have the development, but who can be developed if you nudge them and push them and say, "Uh-huh, you can't do it that way, it's got to be more in this approach."

GUNN: Would you sum it up as saying that it was more fun than anything else?

CAMPBELL: That's right. It was more fun doing that and being able to make a living at it - remember, I got out of school in 1933, where nobody was looking for a young physicist. They weren't in the slightest interested. But I could sell science fiction.

GUNN: Do you ever wish that they had been looking for a young physicist? Or do you think you are so fortunate that they weren't?

CAMPBELL: I think I'm lucky. I've had more fun this way. I've had more opportunity to meet people than I would have in that more limited field; I've been able to communicate, which is something that's fun for anybody. No, I've had more fun this way.

GUNN: The magazines were the breeding ground and testing ground of science fiction - environment in which mutations occurred and the fittest survived. Hugo Gernsback created magazine science fiction in 1926, when he founded *Amazing Stories*. John Campbell made it into something different, something newer and more important, in 1937 when he became editor of *Astounding Stories*, later to be called *Astounding Science Fiction* and then *Analog*.

Through *Astounding* Campbell became the most important single influence on the development of science fiction in the decade and a half after he became editor. And through Campbell, *Astounding* became the dominant magazine in the field, in circulation as well as influence.

But Campbell was not content merely to cull the stories he wanted from those that were mailed in to him: he worked with writers to rewrite and improve their work. And from the ideas that flowed in his head or around his head, from other writers, scientists, and amateur scientists, he suggested story ideas to writers. In correspondence, in conversations in his office and over lunch, he took the ideas of science fiction writers and turned them over and inside out until they were something novel and exciting and astounding: the kind of the stuff of science fiction as John Campbell wanted it.

Here is such a luncheon. Have lunch with John Campbell and science fiction writers Harry Harrison and Gordon Dickson and see the way John Campbell shaped the stories that came to him.

CAMPBELL: Gordie, I have a question for you: when are you going to turn in that article for me?

DICKSON: Well, that's - do you have some kind of a deadline in mind?

CAMPBELL: I have already run the cover that Kelly Freas did on that Apollo 14 takeoff. And in connection with that I said that Gordon Dickson has done an article; and the black-and-whites to go with that will come up shortly. Now, I do have a sort of a deadline.

DICKSON: You'll have it right away then, in that case. I didn't think that. As I say, when I talked to you on the phone, you said you had articles piled up.

CAMPBELL: As I was telling.

HARRISON: Since last year?

CAMPBELL: As I was telling Mr. Gunn a while ago, one of the jobs of an editor is to get the material to fill his magazine. I need it!

DICKSON: [laughs] You shall have it, sir.

HARRISON: And it's his job just to open the envelopes and just open it and print some and put the rest away, return them.

CAMPBELL: Well...

HARRISON: More to it than that?

CAMPBELL: Yes and no. Part of it is, how do you get manuscripts to come in? Of course you always get an adequate slush pile from people who don't know how to write. And then there's another aspect of it. You know there's a little matter of getting the printer to get the job done on time; and you've got to get the advertising department to get their ads in on time; and somebody has to take care of the accounting... I'm lucky. I work for Conde Nast, which is a large company with a whole bunch of experts that take care of all of those headaches. I've raised the question whether Conde Nast employs me or I employ Conde Nast to take care of the headaches while I'm having fun with my magazine.

HARRISON: The residual amount left that you do is the fun part?

CAMPBELL: Yeah, I do nothing but the fun part. All I do is sit around, read stories, and have bull sessions. Miss Tarrant does all the work.

DICKSON: I'd consider this the fun part.

CAMPBELL: I know.

DICKSON: The quantity of words you go through in a year is beyond belief.

CAMPBELL: You know, I have said that I think I can claim without dispute that I have read more lousy science fiction than anybody else in history. I have certainly read a lot of it.

HARRISON: I won't dispute it at all.

CAMPBELL: But one of the ways you learn is by trial and error. I have a great advantage in having observed all those errors. It's a great help in figuring out what science fiction needs to be.

DICKSON: See, you didn't do this in the beginning - now. This business of taking an idea from an author and playing ping-pong with it.

CAMPBELL: Why not? (?)

DICKSON: Ah, good, then you did do it from the beginning. But you do it better now.

CAMPBELL: Yes, I've had more practice. And as I say, I've had the education of reading all that lousy science fiction. You see all the things that you shouldn't do.

HARRISON: On ping-pong - Gordie and I were talking before we came here over a drink, and about themes, general themes. And we touched on one, a single-word theme that I don't think has been done in science fiction. Gordie brought it up.

CAMPBELL: What's that?

HARRISON: Lifeboat.

CAMPBELL: Lifeboat?

DICKSON: There's been no real lifeboat.

HARRISON: The movie *Lifeboat*. A play *Lifeboat*. By the way, when you say that, you will see an encapsulated universe under pressure.

CAMPBELL: I've had a number of stories involving lifeboats and sort of concentrating on them. Gordie... or rather, Randall Garrett did one, in which the problem was that the lifeboat was inadequately constructed. And after they got stuck with it, they couldn't put the parts together to make it work.

HARRISON: There've been no lifeboat stories per se about this...

CAMPBELL: What do you mean by lifeboat?

DICKSON: A first boat... first order, science fiction story about a lifeboat would be a lifeboat translated into interstellar terms, you know - as you say, with Randy, something goes wrong with it because we're in between the worlds instead of being on an ocean someplace. This is only first order. We're talking about second order.

CAMPBELL: What do you mean?

DICKSON: The kind of story that could only happen if people were out moving around in between the worlds.

HARRISON: Also...

DICKSON: Something that could never, not a duplicate of the lifeboat stories here on Earth at all - something that is tied in with the people who live in this ether that is between the planets.

HARRISON: But also based...

CAMPBELL: They don't live in the ether - that's their problem.

DICKSON: Exactly, yeah.

CAMPBELL: And if it's a lifeboat, it means that it is an environment which is unfamiliar to them.

DICKSON: That's probably, yeah, that's probably the doggone... that's probably what you're looking for.

HARRISON: It's not just the one that's been done before of the failure of the lifeboat. Science fiction is captivated by the mechanics of failure far too often: the spaceship doesn't work; the time machine breaks down. But a lifeboat, the idea of it is the encapsulated environment of people trapped there. And what science fiction is doing more and more today is showing the impact of science upon individuals. This would be a story of that - not so much the damned lifeboat falling apart as what happens to people inside this captive environment.

CAMPBELL: And this is *Grand Hotel*.

HARRISON: It's been done as *Grand Hotel* and as *Lifeboat*, right.

DICKSON: Essentially, *Grand Hotel* and *Lifeboat* are similar.

HARRISON: And the ship too.

CAMPBELL: If nothing goes wrong and the lifeboat functions just as it's intended to, you haven't got a story.

HARRISON: Yes, you do.

CAMPBELL: No, it's too smooth and simple.

HARRISON: No, how...

CAMPBELL: Now, it's the people that malfunction...

DICKSON: That's the point. And they're malfunctioning in a way that they would not malfunction on an ocean here on Earth.

CAMPBELL: No, I disagree with you on that. The point that Joe Winter made years ago in one of his stories: no matter where human beings go, what planet they're on, what they encounter, if a man gets sick...

HARRISON: That's a (?) story, right?

CAMPBELL: ...his symptoms will be the ones that he, that people show on Earth, because their symptoms are human beings' sickness - no matter what caused it, he can only have those reactions that he is capable of producing.

DICKSON: They will be not only that - they will be the symptoms peculiar to his historical time and place.

CAMPBELL: Right.

DICKSON: In other words, a Frenchman will get liver complaint...

HARRISON: And also, his culture...

DICKSON: A good Midwesterner will want a laxative, you know.

HARRISON: But it's culture too - I think of the Korean war, the war prisoners. The Americans had various responses to being prisoners of war. That culture was set up in a certain way. Remember the Turkish soldiers who were used to working together, got in there - no one quit, no one broke down; they stayed as a unit. Their culture dictated one certain reaction. Therefore, postulating a lifeboat in a certain time in the future, you must postulate the people in their culture and...

CAMPBELL: You brought up the question of prisoners of war. During some exercises up in Alaska where they had the, the army was divided in two groups: the blues and the reds or something. And one of the things they were doing was holding a prisoner of war camp at which captured blues were being pressured by the reds to give more than their name, rank, and serial number. They were to break them down without violating the Geneva convention. They did. The method was most interesting: they fed them purple potatoes, green milk, orange steaks, maroon peas until the guys rebelled to such an extent they really started breaking down.

HARRISON: Talking about feeding new information through the environment.

CAMPBELL: Unfamiliar aspects of familiar things.

HARRISON: Unfamiliar, right.

DICKSON: All right, here's your lifeboat story. Your lifeboat story is this: we have... Remember in... oh, come on now... *Mutiny On The Bounty*. But remember the other story about how Captain Bligh took the boat 3,000 miles (?) All right. Now, we have a situation where Captain Bligh can't possibly take his boat back by all known standard, except that he belongs to a culture, and the rest of them are in the culture that are ideally adopted like your Turkish soldiers to this situation.

HARRISON: Yeah, yeah. In other words, not just the haphazard cast-off remnants of a mixed society, but you have a reason for doing something with that lifeboat. And the reason that lifeboat is there...

CAMPBELL: You have more trouble if you have two groups.

HARRISON: You're going to have to have at least two groups.

DICKSON: Yeah. In other words, you've got to have a conflict the ones who would not, who would destroy the voyage and those who would make it.

HARRISON: There's a simpler way of doing something for pure survival's sake. The second course you must take for a secondary purpose.

DICKSON: And those who want to destroy it, they seem, should seem the most logical at the beginning.

CAMPBELL: One of the standards of science fiction has been the proposition that there are certain villainous characters, the young scientists are the heroes. And the typical villains are a politician, or a native priest, the feudal duke or whatever his title may be. How about changing that around a little bit?

DICKSON: That's good.

HARRISON: Turn that (?) the order has been, is wrong.

CAMPBELL: The young scientists know they are right because they have the sound scientific evidence and they know just how it goes, that...

HARRISON: In that situation they're wrong completely.

CAMPBELL: But they don't understand the problems of human nature and intercultural differences.

HARRISON: Right. And in fact, the reader agrees with them in the beginning - he thinks they're right as well. He can't understand why they're not being...

CAMPBELL: Yeah, that's, (?) position.

HARRISON: Right, whereas a great big hairy guy with hair in his nose and half a ear, a very bad accent, talks through his nose, happens to be right. Not sure like he's right all the time - in that situation he is right.

CAMPBELL: In essence, he is a politician; he is a compromiser; he is aware that you can not get human beings to act in a purely logical manner and that you can't get any intelligent being to act in a purely logical manner. They have to be rational, but they're entirely different.

DICKSON: One thing more, one thing more: he can see the faults in his fellow citizens without being emotionally disturbed by them. He says, "All right, old so and so..."

CAMPBELL: He has to be emotionally distanced.

DICKSON: No, no. "Old so and so is a dirty dog, and he will knife you in the back; but I rather like the old character, and we must not hold it against him."

HARRISON: He is a utilizer, he is like...

DICKSON: This is the whole point...

HARRISON: He is a catalyst. The fellow who is correct is this thuggish character who is only correct because of the cultural...

DICKSON: Because the culture uses all people.

CAMPBELL: Let me give you an example of the sort of thing I mean. I've mentioned the business about the breaking down the troops by feeding them purple potatoes and green milk and the eggs with the most peculiar maroon effect, something like that. So what if they have a shortage of food

on the lifeboat, and they're going to starve if something isn't done; and the young scientists with magnificent ingenuity succeed in synthesizing necessary nutritive synthetic foods...

HARRISON: But they look...

DICKSON: Unappetizing.

CAMPBELL: ...that nobody can eat unless he is a scientist and is aware of exactly what this coloration means. And it doesn't bother him emotionally. The others perceive that they'll chuck-up if they do swallow it.

DICKSON: Exactly. And not only that, but this is ideal because he would emerge as a hero. We first have a lifeboat situation, and the nominal hero takes charge, the natural acceptable, you know...

HARRISON: In the beginning, in the opening.

DICKSON: Typical boson's mate says, "All right, we're all together here, and we've got to hang together." Lost in the racket is the scientist who later synthesizes the food and emerges in control simply because he knows what to do when the other people don't.

CAMPBELL: May I say this, that generally speaking, the boson's mate would have more sense. The boson's mate wouldn't have been made a boson's mate if he couldn't get along with people.

DICKSON: He has a certain function. However, we are presupposing - at least I am presupposing - that the scientist can do the boson's mate plus: in other words, he can see the function of the boson's mate plus there are certain limits to what the boson's mate can do, and he'll move into this extra area. I like the idea of the boson's mate being the man. I like the idea of the boson's mate taking over from the captain.

CAMPBELL: Right. My point is that the boson's mate would be more apt to understand the human problems than Herr Doctor Professor Gesundheit.

DICKSON: Very well. Let's have not Herr Doctor Professor Gesundheit but a, what used to be commonplace in the Victorian navy - and this is quite true - we had captains who were sort of advanced amateur specialists. There is no word for it nowadays.

CAMPBELL: Dilettantes.

DICKSON: Dilettante used to be, except nowadays it means somebody who's a butterfly. But these are real working amateurs.

CAMPBELL: Generalists, I know what you mean.

DICKSON: Exactly, yeah - who are sea captains, and who also saved and catalogued shells. Captain kept, you know, a pile of charts and things like this, the (?). Now, we have a captain like this, who's a good man, and we admire him; and naturally he takes over. But your boson's mate, as you point out, has got something the captain hasn't got. The captain is essentially a scholastic; and a scholastic has tremendous advantages, but he has tremendous disadvantages too.

HARRISON: Want one more thing that I'd like...

DICKSON: When I hear (?) you must think as a scholastic, but I give him certain redeeming features.

CAMPBELL: Are you going to have more than one intelligent species on board?

HARRISON: I'd like to get an alien...

DICKSON: I would like...

HARRISON: One little alien, with a completely alien point of view. It's a secondary point I've thought about. Other point was, Captain Bligh's second voyage - not being tossed overboard but getting home again. There was a short, simple solution that would do one thing; a long, complicated, hard one that had a secondary point of view that he must be forced to do for very important reasons. Everyone wants to do the short one; they must be forced into the longer one. This is a plot conflict. Plus, the fact, let's say, a single alien perhaps who by his presence resolves conflicts or makes conflicts. It's alien point of view. The Turks in the Korean concentration camp: a different point of view that points up their point of view or their culture background.

DICKSON: In other words, without this, there's nothing to put - there's no frame for the picture.

HARRISON: You've got to throw them against... Because you have this captive environment - the whole point of the thing is this captive environment.

DICKSON: No, as a matter of fact, this, I think we stumbled on something, or I stumbled or we all did: this idea of a dilettante captain - really, this is what Bligh was in a way, he was in love with his breadfruit trees. It's to the point where he's willing to sacrifice his crew for... Now, he wasn't a typical dilettante captain in the sense that we were talking about earlier, but the point is he could've been. This could be a man... Now, remember Bligh lost two ships, not one, historically?

HARRISON: Right, right, I forget about that.

DICKSON: Now, let's have this man losing his second ship and being forced to have the long damned voyage home.

HARRISON: Yeah, right, right.

CAMPBELL: I don't know that you're going to get a very dynamic story out of that. After all, the story of *Mutiny On The Bounty* has been written.

HARRISON: But that's not, not *Mutiny On The Bounty*, no.

DICKSON: (?) That's the point - he isn't Captain Bligh, he is the dilettante captain - the man who means well, who never realized that he was hard on his crew. No, I don't mean that mutiny...

HARRISON: In other words, he's not the captain either, he's the first lieutenant who's forced into this.

DICKSON: In other words, he loses his ship for some other reason. He's not the captain, he the first... Right.

HARRISON: The Captain is dead.

DICKSON: We have the interplay between the first lieutenant, the alien, and the boss's.

HARRISON: The scientists?

CAMPBELL: He doesn't get to be the Captain unless he is a pretty damned good diplomat.

HARRISON: That's what, let's kill the Captain off quickly, let's kill the Captain off and have a second lieutenant there or a first lieutenant who takes over. We don't need the Captain - he's too good, let's get rid of him. Let's have everyone vying for this position that has no outright authority - then they have each one an opportunity to vie for it. Each one wants to do it and knows best that they can do it.

DICKSON: Now, what the alien has to offer is, he knows instinctually, not intellectually, that his way makes for survival and for life...

HARRISON: He always has the answer, and no one gets sick of him.

DICKSON: That's right.

HARRISON: He has the answer.

DICKSON: They all have parts of the answer. Well, the alien is good for, you know, this strength.

HARRISON: Right, none of them are complete by themselves. So as they say, it's a joint exercise in rational intelligence as well. It's not just emotional - the whole business...

CAMPBELL: Alright, I want to throw something in here that's going to make it a little more difficult for you. The alien has a deep instinctive understanding of the ways to survival. That is his specialty. For his species in their environment, he cannot have an instinct for survival for the human species - he ain't human.

DICKSON: Hey, hey, hey, very good.

HARRISON: But being a survivor, he can certainly handle the problem...

DICKSON: Very good. That's why he will, he can take them so far and no further.

HARRISON: Right, right, right. And someone else must come in...

DICKSON: That's beautiful, John, marvelous. He can take them so far and no further because he can only take them as far as his survival is concerned.

HARRISON: And maybe something else can survive.

CAMPBELL: And he can't appreciate that he can't take them all the way.

HARRISON: He can get them to (?) at one point, he can sink into a coma that lasts for 10 years.

DICKSON: How about giving the alien some rank?

CAMPBELL: They can't.

HARRISON: Put him in charge of the whole thing, put him in charge of the whole thing.

DICKSON: So perspective (?). That's right.

HARRISON: He's the captain.

DICKSON: And he seems to be right.

HARRISON: Yes, yes. Yeah, he's the one...

DICKSON: And they kill him. Because as you believe in god, this is, you know, this is the supreme fellow from - this is your guide in the North Woods who knows the way back to camp.

HARRISON: Why not make the Earth men a subservient race working for these people who are much better than they are in their way, they think, until it comes down to...

CAMPBELL: Not subservient.

HARRISON: Not subservient, but they need to, they, there's been a ship.

CAMPBELL: Not subservient, but cooperative.

HARRISON: Cooperative, but... I mean, they're just like there, you know.

CAMPBELL: On this ship, which happens to be owned by an alien company.

HARRISON: Right, an alien company, an alien captain and officers. And we have a bunch of hairy Earth men.

CAMPBELL: He's good - the captain is good; he is a wise man; he knows his business; he has run a tight ship...

HARRISON: But the answers are all wrong.

CAMPBELL: And his answers have all been right.

DICKSON: No, they've been...

HARRISON: All right, all the time, right. And we carry it past the point.

DICKSON: And that's the marvelous thing. Harry and I were talking about it before we got into this... Should we say this on the camera?

HARRISON: You can say it fast, if you want to, by all means.

DICKSON: Well, the point is, this is what you always do with writers: you carry them one step further. And this is exactly what you've done here, see.

HARRISON: You open doors into their plot.

CAMPBELL: One of the jobs of the editor is to throw a hooker, so that the answer comes out different from what the reader would expect.

GUNN: John Campbell used to say, "I see no reason why a man should not live for 450 years - in fact, I have every intention of doing so."

Not everything he thought would happen came to pass. He would've been surprised if it had. John Campbell died of a heart ailment at the age of 61 on July 11, 1971, just a bit more than three months after the luncheon you have just seen was filmed.

CAMPBELL: I think I'm lucky. I've had more fun this way. I've had more opportunity to meet people than I would have in that more limited field; I've been able to communicate, which is something that's fun for anybody. No, I've had more fun this way.

Discussion Questions:

1. Is the John W. Campbell Jr. of this film the same man described throughout the rest of this DVD?
2. How would you characterize the relationships between the three subjects of this film? Place yourself at a meeting with Campbell; how does it go?

3. Is Campbell actually more interested in trying to get these 2 guys to write a story about what interests him (such as the Army prisoner experiment with the colored food that he keeps bringing up), than in hashing out the lifeboat concept?
4. How do assumptions about the environment influence the story development? How do concerns about the environment inform the unique characteristics of SF?
5. How has “*Lifeboat*” been altered to become an SF concept? Is it yet a comment on human beings of the here and now? Explain?
6. What does this story conference tell one about the importance of characters to science fiction? How, if at all, does their treatment vary from mainstream literature?
7. Does this discussion support or confound the widely accepted notion that Campbell was disinclined to make aliens the equal (or the betters) of human beings?
8. How much, ultimately, did Campbell bring to the story discussed? Did he carry his writers one step further?

Chapter 11 – Responses to “Lunch”

This section attempts to place both the filmed “Lunch” and the Campbell luncheon meeting generally, into an historical context, while letting two former participants share their thoughts.

SAWYER: One of the nice things that was true in the era of Campbell was that he could meet face-to-face with writers. We talked about science fiction as an American phenomenon - in fact, it was a New York City phenomenon for very much of its formative years.

The writers lived in or near New York and would often go by the offices of Street & Smith Publications, who were the publishers of Astounding Stories. Campbell liked it: he got to take an author out to lunch and put it on the expense account. The author liked it: he got a free lunch. But over those lunches, over those meals in restaurants or cups of coffee, the ideas were batted back and forth.

HARRISON: In the film Lunch With John W. Campbell, I think is a fair image of an average lunch with John - or the average conversation with John. Lunch for him was just a chance to sit down and talk. He had this effect.

He would give you ideas - outright ideas, which you could or could not develop. He would also take your ideas, twist them, and make them, make you think harder and not take the most obvious. One thing that writers should never do when writing, is take the easiest answer, because that's a bad, boring novel. And John made you think hard.

KLASS: Now, other writers talk about the wonderful ideas that Campbell gave them - it didn't work with me at all. And I didn't understand until I saw the tape that James Gunn made of Campbell having lunch with Harry Harrison and Gordon Dickson. Where they try to show what it was like to have these luncheon meetings with Campbell, where they - editor and author - worked on stories.

And I watched that tape, and I was very much impressed by the fact that Campbell wasn't listening to these people. He wasn't listening to Harry. He wasn't listening to Gordie. He was just letting them talk, and then he would come back to the story he wanted to write that they were going to do the actual work on. And this was one of the things wrong with Campbell. And I didn't quite appreciate how strong it was until I saw that tape.

HARRISON: One thing about John Campbell, he was the best listener in the world. He took your ideas and bounced them back as mirror images, or warped images. In the *Lunch With John Campbell* you can see it on camera. That we were creating something there, and he was creating - it was a tripartite thing, all three of us working together. Maybe Gordie and I were going to write the book later on, but his input was so vital to the novel that it would've been a different novel if he hadn't done it.

You may have never thought he was listening, because he was arguing with you all the time. But he was arguing with what you had said.

SAWYER: These days, with science fiction writers scattered all over the place - up in Toronto where I am; down in Australia; all over the English-speaking world, writing for the same magazines - you'll get a terse couple of paragraphs back from an editor. You can't have the luxury of that hour-long lunch, and sometimes every month the same author an hour-long lunch, shaping and moving the vision. Campbell did that. He worked directly one-on-one with authors in a way that we just don't see anymore.

Discussion Questions:

1. How can one reconcile the diametrically opposed views of Harrison and Tenn (Klass)?
2. Obtain a copy of *Lifeship* and consider the ultimate import of this story conference.

Chapter 12 - Pseudoscience

John W. Campbell was often criticized for his embrace of non-standard scientific thought. This section attempts to put JWC's beliefs into perspective.

SCHMIDT: One of the central premises of Astounding and Analog, at least as far back as when John took over, is that it is important to question everything. If everybody believes something, it's probably time to take a new look at it and find out where the holes in it are, or whether it really is solid enough that everybody should believe in it.

POHL: He kept looking for something new that would prove that there was something beyond orthodox science which he could explain and bring to the world. And the fact that all of his attempts to find it turned out badly - or at least inconclusively - just never doubted him. He just kept on trying, looking for something new all the time.

CLEMENT: He had a tendency to go overboard on non-standard pseudoscientific ideas. He was the one who started the big push for what's now called psionics. P-S-I-onics. His original example was an article on something called Hieronymous machine; and I don't remember all its details now except that it didn't work for me.

DISCH: One of the problems science fiction faces is that not only do we not have ships flying to the stars yet, but interstellar travel is of a different order of difficulty than travel to nearby planets. It would take forever to go there at the speed of light. You have to overcome Einstein's basic laws in order to have interstellar flight. So he promised his readers - who want interstellar flight very much - the defeat of Newton's and Einstein's laws of physics in something like the Dean Drive, and also in promoting various kinds of balderdash about psychic powers.

CLEMENT: He tried to sell the line on something called the Dean Drive, which violated the law of conservation of momentum - you could do something with the spinning wheel which would cause the centrifugal force to go in one direction. That sort of thing. Much of this, I suspect, was done with tongue in cheek in an attempt to inspire listeners with story ideas. I'm quite sure that was the case sometimes.

BOVA: I think a lot of his interest in extrasensory perception, his firm belief in experiments of Dr. Rhine, was basically because they challenged the accepted wisdom. There is a part of John I think that wanted to thumb his nose at the scientific establishment. And he did that quite often.

SCHMIDT: What he was really doing was pushing the idea that there might be things that were being systematically ignored by conventional science. And this is a valid point which actually warrants some concern among scientists: there is a process for peer review. But it can get a little stodgy at times.

SILVERBERG: John was a rebel, kind of Prometheus figure. Yes, he'll bring fire to the masses; but he is going to rebel against the dictates of the Gods. And his rebellion took the form of espousing unorthodoxy in science particularly, and in society. And this was fine when the orthodoxy said, "There is no value in studying atomic fission," and the unorthodox said, "Oh, we could use this - perhaps we can end the war with this."

But later, John's love of unorthodoxy led him into some preposterous areas more and more and more as, I guess, he aged and grew more cantankerous and more opinionated.

DISCH: What if any of those phantasms or daydreams turned out to be true? That, then he would've been the John the Baptist of a new age in humanity. It didn't happen that way. But I suppose that was his fantasy each time he got on a new hobbyhorse.

SAWYER: I think we have to forgive him this. If there's one truth about science fiction people, we believe, as the British scientist Haldane said, that "The universe is not only queerer than we suppose, it's queerer than we can

suppose." We think there ARE fascinating things yet to be discovered. And if Campbell was a little too credulous, a little too willing to buy in to psychic phenomenon, or the Dean Drive, or any of the number of other crazy things he got involved with, it comes with being a science fiction person who wants desperately to believe that the world is an amazing place.

Discussion Questions:

1. By "questioning everything", was JWC merely pushing beyond the stodgy, academic/scientific barriers to find the sound, but rejected, revolutionary idea? Or, does it also seem that ego and glory-seeking were involved?
2. Is it possible that Campbell's readers were interested in these areas at the borders of science? Consider the notion of the superman in this context.
3. Is the jury still out; are any of these ideas yet acceptable?
4. Were JWC's recurring declarations (in letters and editorials) of his "amateur" status in science made only to distance himself from accountability? To skip lengthy empirical testing? Or, to deflect the taint of possible failure of the ideas and causes he was championing?
5. How does Campbell's embrace of "pseudo-scientific" ideas from the 50's onward stand in contradiction to the emphasis upon plausible or "hard" science in what he had previously sought to publish?

Chapter 13 – The End of The Golden Age

All good things must come to an end. Or so we're told.

*Harry Harrison's comments in this section implying that Astounding always outsold its competitors is probably inaccurate. It is also doubtful that **Dune World** was an unsolicited, slush-pile story. (See Appendix I, letter from Bill Patterson).*

GUNN: When he created The Golden Age, a period that lasted from about, say, 1938 to 1950, he was confident that he was in charge. And he was. He - everybody looked to Astounding for leadership.

And then, when The Magazine of Fantasy and Science Fiction was created in 1949, it represented a different, you know, another alternative to Astounding. It represented the opportunity to create things that were more like literature - and that's why it's always welcomed fantasy, which is more like literature. And Galaxy, which was more - took over the sociological, and attempted to be sort of The Saturday Evening Post of science fiction. To make it sophisticated. And these were serious rivals.

MOORCOCK: Campbell's idea and the kind of the thrust of Gernsback was all, you know, "We produce the science fiction, and it will explain the future, and we will be able to control the future or control society by means of these mechanistic, this mechanistic understanding." Now, that is what we've rejected in Communism and Fascism. I mean, the same mechanistic approach to society - because we know it doesn't work, apart from the fact that it does a lot of damage. But even if it didn't do any damage, it doesn't actually work.

MALZBERG: Campbell the editor was more than willing to admit to his pages writers and work which was technophobic, despairing, bleak, desperate, and in all ways laid open to question the efficacy of technology on any level.

Campbell said shortly after Hiroshima in a famous editorial and its successors, was that unless there was evolved very quickly, some means of controlling nuclear energy, that we were going to destroy ourselves.

ASIMOV: Once again, the center of interest had moved away from scientists themselves towards society. It wasn't back to the adventurous hero - it was towards society. Science fiction became even more socially significant. And Campbell's *Astounding*, while continuing to be the most successful single magazine in the field, was no longer unchallenged.

GUNN: Campbell was not alarmed by the popularity of other alternatives. When *Amazing Stories* back in the late '30s and early '50s... or early '40s became very popular - was publishing *The Shaver Mysteries* and so forth, and was apparently selling, I don't know, maybe 125-150,000 copies, whereas *Astounding* maybe was hard pressed to get up to 100,000. The story goes that Campbell was asked, you know, "Aren't you concerned about this as a rival?" He said, "Oh no," he said, "they'll - the more they get, the more they will graduate to reading *Astounding* when they learn how to read."

But that isn't true of *Magazine of Fantasy and Science Fiction* and of *Galaxy*; and I think that Campbell may well have thought that he needed to use more risky strategies in order to compete with them.

POHL: In the '50s and thereabouts, '60s when I was editing *Galaxy* and he was still editing *Astounding*, we competed head to head, and I beat him. I mean, I got first crack at the stories that he wanted; and I won more of the awards than he did, and so on. But by then, John was really tired of the whole business. He had been in the same job for 30 years and had run out of interest in it.

HARRISON: Most writers couldn't sell to Campbell. They didn't rise to the heights of the story-telling ability that he wanted to buy. There was a lot of jealousy around there, and a lot of editorial jealousy, because whatever other editors say, his magazine was always first and always sold twice as much as any other magazine. And he got the stories in his later years, before he died. He's been accused of nodding his head - I don't think he did. For one thing, that was when he discovered me, so I think the Golden

Years went right on into the '60s because I submitted to him - I sold him some few short stories, then we worked on my first novel.

This was a time when other editors were saying, "Now, he's a rotten editor, and we are (?)." Nonsense. His magazine always sold more than every other magazine.

MALZBERG: The fact that Campbell survives as one of the great, honored names in the pantheon of science fiction, although little known to the public, but is still highly regarded, is a testimony to how good, how really remarkable his contribution was, because the last 21 years were bad. It was pseudo-science; it was, you say... you're going to ask me what was it - it was dianetics; it was dowsing; it was the Hieronymous machine. It was a whole nest or forest of garbage pseudo-science and terrible fiction commissioned to propitiate the pseudo-science, which much debased the magazine. And all of his pseudo-science was worthless.

MOORCOCK: Campbell, like a lot of those people, was, you know, he was a pulp editor; and his audience was a largely uneducated or self-educated popular audience. Now, a lot of those people were very smart and became very, very good scientists; but they weren't very broadly educated. So that Campbell could make all kinds of social, you know, comments and all sorts, and they would just sort of say, "Oh yeah, well, I suppose that's true." And it was balderdash. It wasn't even arguable. It was just soppy, you know, it was just crap. It didn't have any logic to it.

KLASS: If he wanted to see me, he would usually send me a letter. Never called me. And somewhere in the '50s he began calling me and telling me that he wanted me to write for him again. And he would say things like, "People feel that Astounding is no longer THE science fiction magazine - we'll show them otherwise, Phil." Sort of like a coach calling his beaten up players back into the game.

POHL: He was really going through the motions for the last 20 years, I guess, of his career. Just going through the motions, he put out a pretty good magazine; but he wasn't inventing anything anymore.

HARRISON: As someone said that magazines were there for a place to be bad in - pulp magazines were. And as the field closed down, books became more important, hardcover and paperback. And while he was still doing wonderful work, while he was still - he's the guy who bought *Dune* out of the slush pile - published all the early Frank Herbert, *The Dragon In The Sea*, *Under Pressure* - his impact on the world lessened as novels became more important. So it wasn't that he was nodding his head, or the magazine was worse at the end of the Golden Years. It's just that the impact of this single magazine was calmed out by the endless publication of books.

Discussion Questions:

1. Harrison mentions the "endless publication of books" as contributing to the decline of magazines... What of TV, the burgeoning volume of movie screens, etc.?
2. Is it possible that Campbell's contribution was so firmly installed in the consciousness of readers, that new approaches were demanded? Did the genre itself expand in a way that required distinctive multiple points of view?
3. Was Campbell's approach "mechanistic," as Moorcock suggests?
4. Was Campbell the uncritical technophile he has often been described as?
5. What constitutes a "Golden Age?" What years constituted the term of Campbell's ?
6. What is meant by, "the Golden Age of science fiction is twelve?"
7. What other events or influences contributed to the end of what's referred to as the "golden age" of SF? - If the golden age is 1938-49, then perhaps postwar prosperity or the depressing nuclear threat contributed to the shift?
8. Did the stress of the nuclear age or the "space race" serve to dissipate the earlier, innocent yearning and imagination of a depression-era public that had dreamed of the stars and a bountiful future (thereby turning post golden age stories more sociological, cynical or technophobic)?

Chapter 14 – Final Chapters

A few stories and memories - each worthy of being the final word in this project - are gathered for your consideration.

MALZBERG: The only time I met John Campbell was a couple of days after his birthday - it would be on June 12, 1969. His birthday was June 10th. He was, at that time he had just, he was just 59. Can you believe that - I met this ancient man in his office. I am older than Campbell was when I met him, this relic. I find that astonishing.

But I wanted to meet him; I always had. I was editor, the new editor of The SFWA Bulletin, so I had an excuse to meet him. I could talk about market trends. So I met him - he was perfectly willing to see me. And I sat there with Kay Tarrant in the background for two and a half hours. And we fought. We fought about Vietnam and the space program; and there was not an issue on which the two of us could agree. And he was provocative, and he was obdurate. He hated the New Wave; he hated work in which there were no definable heroes, in which science fiction was - it was used to work against the spirit of human conquest. We fought and we fought and we fought. We found nothing to agree upon. And at the end of it I very politely shook his hand and said I was grateful for his time.

And I went out of there, and I pressed the, for the elevator; and I stood in that hallway outside of Campbell's office. And this was the man, I mean, he was so remote and so powerful; he was, he meant so much to me in the early '50s. And he meant of course just as much then. I stood there thinking about the stuff coming out of him, and I'm just trembling with rage and shame and humiliation and grief - and sheer anger, just anger at this - how could this unreasonable old bigot...

And as I waited, John Campbell came to go, on his way to the men's room, having dismissed me. And he saw me there. And he looked at me - and I am just trembling and shaking with anger. And he comes over, and he gives me an affable slap on the back, and he says, "Don't worry about it, son. Don't take it personal. I just like to shake 'em up."

KLASS: Anybody who had anything to do with Campbell came to that, to the funeral, as if it was a command performance - you had to be there, everyone felt. One had to be there. Campbell had died, and there was a funeral - my god, I just have to go. I canceled my classes the next day. Just nothing, no doubt about where I had to go. People, everyone who could possibly come in any way at all came there. The only people who couldn't come were the people possibly who I think were living on the West Coast. And I think it was very difficult to make it, because it was just a few hours' notice.

And we came to his home and there were folding chairs in the living room. And there was an enormous mob of us who sat in those folding chairs. Asimov was there and Del Ray was there - Sturgeon was not. And everywhere you looked, there were Campbell writers. Hal Clement was there. Everywhere you looked, there were the Campbell writers all over the place. And we were told to take chairs - I mean, this was going to be the funeral. There was no casket visible.

And after everyone was seated, Peg Campbell, who was Campbell's second wife, turned on a tape recorder. And Campbell addressed us. He conducted the funeral. He had prepared for his funeral in advance. And he did his own eulogy; and he spoke about his contribution. And you just listened to him. It was Campbell after all. He was talking. He was dominant. He was the editor.

HARRISON: It's very hard to sum John Campbell up. The person, the man, the editor, the writer. The friend. And I really think that he was very good and strong on all scores. I mean, he edited that magazine right through the Golden Years - and the Golden Years went a lot further than people think, right up to about the time he died.

And he was accused of being a fascist and right-winger - he wasn't. He was a technocrat, something that existed in the 1930s, during the Depression. And Bob Heinlein was a technocrat. Their belief was that technology and engineers could cure everything. Of course they couldn't - they're pretty bad at it. But John, though he had his own feelings politically - could be viewed as right-wing - would suffer anything, any attitude if it was a good story.

We should remember him in his strongest role as editor, THE EDITOR - the man who invented modern science fiction. And none came before him, and certainly none came after him. He was unique in the whole world.

Discussion Questions:

1. Did Campbell's frequent attempts to "stir-up" readers and writers with controversial editorial opinions contribute to his legendary status ? As compared to his achievements in "shaping the genre?"
2. As argumentative and daunting a figure as Campbell was, he has yet installed himself firmly in the hearts of more than a few, why?
3. Why has Campbell been so broadly forgotten? Why should he be remembered?
4. Sum up Campbell and his contribution. Has he influenced editors of the present day?

APPENDICES

Appendix A

Text of Campbell Letters from the DVD

Campbell was famous, even notorious for his letters. The first (to Frank Bell) may be taken as a very brief self-definition. The letter to Farmer is an excellent example of a Campbellian discourse on character, plot and theme, featuring a very interesting discussion of slavery. The final letter, to Isaac Asimov, is part of a long, deep correspondence and friendship. The two men argued back and forth over a range of topics, including many of Campbell's controversial social and historical constructs. Volumes containing Campbell's letters are available (see Appendix J).

To: Frank M. Bell
May 11, 1971

Dear Mr. Bell:

If anyone ever tried to make me any kind of ruler, I would immediately abdicate!

How the hell can a man have any fun sniping at stuffed shirts when he's the official Poo Bah?

Sincerely, John W. Campbell, Editor

To: Philip Jose Farmer

September 5, 1955

Dear Phil:

The trouble with most of the story ideas you've suggested is that they all fall into the class that no one yet has been able to present. The standard novel is supposed to present the development of an individual character; science-fiction is trying to find a technique for presenting the development of a culture. So far, it hasn't been done, and nobody has yet figured out how it can be done.

Each of the themes you want to present is too damn big to be handled; each is an essentially valid theme. Gibbon presented the *Decline and Fall of the Roman Empire* in... what was it, eight volumes. An historian is expected to have a long-timer viewpoint; who lives long enough to experience 800 years of history? And if the wandering Jew did, could he tell it to you so you could feel it? No more than you can explain what adult love means to an 8-year-old. No more than one can explain to a 17-year-old kid what it means to look at a new-born baby, and know it's your own child.

Even if you knew what 800 years of history meant... you couldn't write it in English.

OK - so don't try.

Isaac Asimov did something of the sort very neatly, though; he told a series of stories of the Foundation. Each covered a brief span of history - but each constituted a point on a greater pattern.

You mentioned the business of giving up democracy and going to an aristocracy system. Yes; that's coming. But you can't talk about the 100-year sweep of time involved in it, because no one man can experience it. But I'll tell you what you can do.

Look: the standard proposition is that a reader is supposed to identify himself with a character, A, in a novel, and see-understand the changes that character A undergoes during the course of the story. But the important thing is not that the story-character is changed... but that the reader is changed. The importance of the identification is that if that is established, then changing the character must necessarily change the co-identified reader.

(Cont.)

(Farmer letter, cont.)

Why do you want your reader to identify with the central character? Why do you want the central character to change? The purpose is, I believe, that you, the author, can change the character. If you can induce the reader to co-identify, then when you-the-author change the character, you will, by a sort of sympathetic magic, induce a comparable change in the reader!

Readers are, however, notoriously slippery people; they'll drop an identification that gets too uncomfortable. They want to co-identify with successful, heroic characters. With good-in-their-terms individuals.

OK - if what we want is to change the reader... then there's a trick we can throw him.

We have a story, in which two characters are presented early, A, and B. A states his philosophy - and the reader is easily able to identify himself with it. B, on the other hand, states a philosophy that, "Aristocracy is a good idea," and, "Murder and assassination are good and useful tools," and, "Human sacrifice makes sense under some circumstances," and so on. A is solidly identified as the heroic and steadfast character, while B is seen to be a vile opportunist.

As the story progresses, A gets into trouble, and B hauls him out. A's troubles result largely, it appears, from a bull-headed insistence that A Good Idea Is Always Good, even when it isn't. About half-way through, the reader finds that A's bull-headed steadfastness is ruining everything he touches, and B looks like the one who's going to save the bacon. And, of course, readers being slippery characters, the reader switches identification to B.

And of course the story winds up with A restating his philosophy in the same terms he started, while B restates his in his original terms. A hasn't changed a bit, because he's too bull-headed stubborn and B hasn't changed a bit because he was right in the first place.

But the reader's changed. And he gets a lovely kick in the emotions hearing A restate the philosophy that he, the reader, accepted so surely only about 230 pages ago, and recognizes that A, the poor old dope, is just incapable of learning. He hasn't learned, and probably won't ever learn, the guy's such a bull-headed and stubborn old "I'm always right" character.

So B, and the reader (who has co-identified with B, by this time, of course) go off and leave A to blunder his way through life.

(Cont.)

(Farmer letter, cont.)

B, in the meantime, has committed murder, assassinated several people, set himself up as an aristocrat, and participated in human sacrifice. He's also arranged a few wars, and ruined the lives of tens of thousands of people.

The essence of good writing is to abstract the crucial data - and make it clear that these are crucial. To tell a series of stories which form a pattern - because no individual can experience the long-term sweep of history, each individual is like a single fiber in a rope; he doesn't start at the beginning of history, nor will he endure to the end - yet he is an essential part of history. Each fiber of history is only about 50 years long, yet the whole 3,000,000,000 year length of history is made up of those short fibers, and is a strong rope.

I'm not going to comment too individually on your story suggestions, because the manner of presentation, not the theme, makes or breaks a yarn - as you well know. Therefore, it's futile to comment on an outline, save in broad, general terms ... as I have.

I don't suggest that you rewrite *The Green Odyssey*; you can, I believe, sell it as it is - and God knows you can generate ideas faster than you can write anyway. Right now, I've got novels running out of my ears, and I've got Eric Frank Russell, Lester del Rey, A. J. Budrys, and Isaac Asimov threatening me with new novels-in-process. The series-of-stories technique will handle better the ideas you want to display, anyway. Try it that way.

Regards, John W. Campbell

Isaac Asimov

August 13, 1954

Dear Isaac:

The Second Edition arrived yesterday; haven't had a chance to read it, but it's a handsome looking job. Reading bio-chem is not something I can handle in heavy doses, and enjoy it. So it'll take me a couple of weeks to get the differences.

This letter's primarily to acquaint you with some interesting data that's been showing up. "The Cold Equations" has received a hell of a reception; some are hotly mad, some are warmly enthusiastic – but none are coldly indifferent. You know the old business about a novel being supposed to show the development of a personality. Well there's a reverse English on that that an author can get away with... if he's good enough. That is to present an unacceptable character, and not change him, but make the reader change!

Godwin accepted the unacceptable proposition, "It is right and proper to sacrifice a young woman." That's been out of fashion, and highly unacceptable, since the Aztecs stopped sacrificing them 1000 years ago. But you see, it's not wholly [sic] wrong! Godwin made the point; the reader is forced to agree that there is a place for human sacrifice.

We have another one coming that will, I think, lift some more hair on end. Polly and Kelly Freas read it when Kelly took it home to illustrate – and fought about it for a week. (That's the kind of yarn I like – the reader doesn't sigh, yawn, and turn the page to the next one.) (Should human beings be treated as animals held for breeding purposes? Answer: Yes! Under these circumstances....)

Poul Anderson has a character in his new novel that will stir some discussion too. She introduces herself to the hero – Langley, 21st century American, irrevocably time-displaced to 72nd century culture of aristocrat-commoner-slave – by saying, "I'm Marin. I'm a Class Eight slave. I'm 20 years old, a virgin, and Soandso bought me from the Xxx Breeding and Training center to give to you."

(Cont.)

(Asimov letter, cont.)

Marin has been selected and slightly altered by plastic surgery 'till she's a physical duplicate of Langley's time-lost beloved wife. When he first sees her, it throws him into a tizzie, naturally – because she's the living, walking image of his lost beloved. But – his wife was never a slave, and never accepted a slave philosophy. Marin is – and Anderson presents the fact with the brutal directness implicit in her introduction. Later Langley asks why Soandso gave her to him. Does he expect Langley to be overcome with gratitude? "Oh, I don't think so," Marin says, "I'm not a very expensive present."

Langley is presented with the damndest emotional snarl you ever heard of – and, therefore, the reader is too. He's feeling bitter and upset, and says to her. "All right – you're mine. That means anything goes?" She says "Yes, sir." But he can see that she knows, of course, that there are perverted and sadistic buyers – and is facing up to that possibility. He can return her, sell her, give her away, free her, possess her, or kill her. She's his as much as a radio set would be.

But – she's the girl who looks exactly like his beloved wife. He can't sell her... because he can't face the fact that there are sadistic buyers. He can't give her away or return her for the same reason. Free her? She's a highly bred, highly educated, thoughtful young woman. The Class Eight slaves are bred and trained as concubine-companions for the high-level aristocrats [sic] – and they're high-level people. Freed, she has the choice of being a commoner's wife, a servant, or a prostitute – and no chance of meeting the kind of people whom she is bred and trained to enjoy and understand. Freeing her would be a cruel punishment, without just cause, based on his fantastic insistance [sic] of no-slavery.

His orientation and conditioning make possessing her unacceptable. The most practical solution would be to kill her; it would save him a lot of trouble. That is, it's practical logically! Naturally, he's a sucker for her; she is practically identical to his lost wife. BUT... he can't accept her acceptance-of-being-a-slave. He can't love her, because he can't win her love; it was given to him by her buyer, and conditioning she was given at the training center. Marin's prize line is, in effect, "Yes, I have been conditioned to accept my owner. It is my function in life. But every woman's function is to want a man, and love him. And aren't we all conditioned – you, I, everyone? You were conditioned haphazardly by life; my conditioning was thoughtfully planned – but we're all conditioned."

(Cont.)

(Asimov letter, cont.)

What Poul's done is to use his anthropological background to present something you damned seldom get a chance to look at; the fact that a highly intelligent human being can rationally accept being a slave. Aesop, you know, was a slave. And it takes courage – real guts – to accept slavery. To be a slave is a passive thing, and takes nothing beyond physical existence. But to accept slavery takes high courage – as Marin displayed in her answer to Langley's "That means anything goes?" The free man can run out if he doesn't like the job ahead; one who has accepted slavery knows he can't – knows he's accepted the risk and the tough spots. Acceptance of slavery means accepting the risk of the sadistic buyer – precisely as accepting Life means accepting Death, too.

I've been looking at some of the possible interpretations of history in the light of what Anderson presented there. Ever try to define what "slave" means? Very difficult, it turns out. Consider this: I propose that high-level culture can result only from a race that has accepted slavery – being slaves! The Amerindians, you know, could not be enslaved; they died.

Now there is a curious thing; the parasite host relationship appears to be rather like the master-slave relationship. But... symbiosis merges without break into parasite-host relationship. And true cooperation is mutual slavery!

Who's the slave? A child appears to fulfill the legal definition of a slave. I can, by will, give my children away, as I would a slave. They must obey my commands, and if they do not I am legally permitted to – and socially expected to – apply corporal punishment. They're slaves, aren't they? No; I'm the slave. I am legally required to support them in idleness by the sweat of my brow. Well, maybe Peg's the slave, then? She has to wash and clean and mend and care for my house. But no, I'm the slave. I'm legally required to support her.

Who's the slave? We all are! But it's symbiosis – not parasite-host relationship we're looking at. It's slavery with 100% negative feedback, so that cause and effect are inherently indistinguishable.

But you see, only a people who can accept slavery, and has the courage to stand up and say – and mean – "for richer, for poorer, for better, for worse, in sickness and in health..." and knowingly accept the risk of the sadistic partner, the good with the bad – only such a people can establish true cooperation.

(Cont.)

(Asimov letter, cont.)

The courage of the free man has long been sung. Maybe... could be perhaps... it's been somewhat over-rated? Maybe it's the courage of the egomaniac? The courage of the irresponsible?

It doesn't, of course, take anything but existence to be a slave. How many people have the courage to accept in full the consequences of slavery, though? Stories in there, possibly?

Regards, John

PS: Langley finally gets some understanding of the meaning of conditioning. He marries her.

Appendix B

Text of Campbell Editorial from the DVD

Arithmetic and Empire

It was van Vogt's story "Storm" that started me thinking on the problem; this item would have appeared last month had it not been that the announcement of this new size became necessary. The problem is simple in statement - the governmental set-up for maintaining peace and order in a galactic empire.

At present, all theories of how planets are formed are lying in ruins. (It's interesting that, even before the discovery of the extra-solar planets, the various stellar-collision theories had been mathematically proven wrong; 61 Cygni C simply confirmed the fact.) We haven't any idea how planets come about, but every star which we have been able to observe minutely enough to make the detection of a planet possible has shown planets. I think it's fair to set up an hypothesis on the basis that all stars have planets; many stars have habitable worlds. Four hundred million planets capable of supporting human life, within this galaxy, is not stretching possibilities anywhere near the limits.

Then, given a fast interstellar drive, and, say five thousand years of time, what sort of human population might the galaxy develop? When it comes to population increase, rabbits and guinea pigs have a reputation as experts; the reputation is somewhat undeserved - they simply have short generations. Man can do a very fine job of increasing the population when conditions warrant it, and there's some time allowed.

This planet, under present conditions, has a population of about two billions. With improved methods of producing food - you've perhaps noticed that item about making a meat-flavored, meatlike food from yeast, ammonia and sugar? - it could support some fifty billions without discomfort. Since a planet habitable for human kind will, of necessity, be Earthlike, an average population per planet of one billion would be conservative.

(Cont.)

(Arithmetic and Empire, cont.)

That gives the tidy total of our hundred million billion people. Like the number of light-waves in a mile, the number doesn't have much emotional meaning - it remains a "4," which we can understand, followed by a string of zeros which quickly cease to mean anything real or understandable.

But this part of it does become understandable. Such an empire would have to have a home-rule governmental system, with local area governments in each city, up through continent governments, world governments, and system governments. Van Vogt suggested in "Storm" that some central government would be essential to keep individual planets, systems, sectors, and quadrants from warring amongst themselves. It seems reasonable. Let's see what sort of affair that would be.

I don't believe that the United States Federal government could be operated effectively by one hundred fifty men - including the whole set-up from President down through and including the Army, Navy and Post Office clerks. One civil servant per million people is impossibly small, percentage-wise, to be effective. That's a figure that must be expanded.

But our galactic empire government must, then, have more than that microscopic percentage of one-in-a-million, must have more than an impossibly scant four hundred billion Federal employees.

Perhaps, if Earth were made one solidly built-up capital city-world, supported by the microscopic taxes collected from the individuals of the empire, by the goods shipped in from other, producing worlds, this one planet could serve as the empire's governing world. Otherwise, it would take some two hundred planets to support the government's functionaries.

Incidentally, a congress made up of representatives each of whom represented a billion individuals would be a more populous affair than the North American continent now is - twice over! To have a representative body of manageable size, each legislator would have to represent some million billion people.

The one-in-a-million figure of governmental employees is certainly too small; there will be some compromise figure between our present-day over-high percentage of government workers - after all, the problem of governing populations of more than one hundred million people democratically is less than fifty years old - and that too-small figure.

(Cont.)

(Arithmetic and Empire, cont.)

The availability of really fast communications will aid a lot too. As long as human nature remains roughly comparable to what it is today, a face-to-face, person-to-person conference will continue to be more solidly, definitely effective - and it takes time to go from point to point. Since most governmental conferring is within the capitol, fast communications - say van Vogt's trick walls - would help fewer people to accomplish more. But all this deals only with the central government. How many people would be engaged in all governmental work in an empire of 400,000,000,000,000,000 people, including town, city, county, district, continent, world, stellar-system, sector, quadrant and galactic governments?

Galactic empire has been glibly considered fairly frequently in science-fiction. But - has anyone any workable suggestions for a galactic government?

November 1943

Appendix C

Campbell Bibliography

This bibliography has been adapted from the bibliography posted on sfsite.com, compiled by Al von Ruff, and used with their permission. Neither sfsite.com, nor the Producers can guarantee the accuracy or completeness of these reference.

Campbell, John Wood, Jr. (USA, 1910-1971)
(Pseudonyms: Don A. Stuart; Karl Van Campen)

Awards with No Bibliographic Records:

[Hu] = Hugo Award: [1953] [1955] [1956] [1957] [1961] [1962]
[1964] [1965]

[Rh] = Retro Hugo Award: [1996]

[Sk] = Skylark Award: [1968]

Biographic Data: Campbell received a degree in Physics from MIT and Duke University in 1923; his first story was published while still a student at MIT. His initial splash was in *Amazing Stories* with his Arcot, Morey and Wade series, which established him as Edward E. Smith's main rival in galactic epics. He later took on the pseudonym Don A. Stuart (supposedly derived from wife, Donna Stuart), to move away from space-opera, changed his writing style to a more literary tone, and began writing stories for Tremaine's *Astounding Stories*. He also wrote the controversial short story "The Irrelevant" under the pseudonym Karl van Campen.

In 1937 Campbell was appointed editor of *Astounding Stories*, and would remain so through its name change to *Analog* until his death in 1971. As editor, he discovered Isaac Asimov, Robert A. Heinlein, Lester del Rey, Theodore Sturgeon, and A. E. van Vogt. He also brought L. Sprague de Camp, L. Ron Hubbard, Clifford D. Simak, Henry Kuttner, C. L. Moore, and Jack Williamson into the *Astounding* stable of writers. He was also instrumental in the originations of many classic SF ideas; Asimov co-credits Campbell with the Three Laws of Robotics.

Campbell also edited the fantasy magazine *Unknown*, a companion magazine to *Astounding*. *Unknown*, along with *Weird Tales*, helped to shaped the fantasy genre into it's modern form. *Unknown* died prematurely due to a wartime paper shortage.

Series

Arcot, Morey and Wade

The Black Star Passes (1953)

Islands of Space (1956)

Invaders from the Infinite (1961)

Magazine Appearances:

Invaders from the Infinite (Complete Novel) (1932)

The Black Star Passes (1930) [SF]

Piracy Preferred (1930) [SF]

Solarite (1930) [SF]

Islands of Space (1931) [SF]

Mightiest Machine

The Mightiest Machine (1935)

Magazine Appearances:

The Mightiest Machine (Part 1 of 5) (1934)

The Mightiest Machine (Part 2 of 5) (1935)

The Mightiest Machine (Part 3 of 5) (1935)

The Mightiest Machine (Part 4 of 5) (1935)

The Mightiest Machine (Part 5 of 5) (1935)

The Incredible Planet (1949)

The Machine

The Machine (1935) [SF][as Don A. Stuart]

The Invaders

Rebellion (1935) [SF][as Don A. Stuart]

Novels

The Moon Is Hell (1951)

Invaders From the Infinite (1961)

The Ultimate Weapon (1966)

Magazine Appearances:

Uncertainty (Part 1 of 2) (1936)

Uncertainty (Part 2 of 2) (1936)

Collections

Who Goes There? (1948)
The Incredible Planet (1949)
The Moon Is Hell (1951)
Cloak of Aesir (1952)
The Black Star Passes (1953)
Who Goes There? and Other Stories (1955)
The Planeteers (1966)
The Best of John W. Campbell (1973)[Lc1977 n]
John W. Campbell Anthology: Three Novels (1973)
The Space Beyond (1976)

Anthology Series

Analog
3 Analog 3 (1965)

Anthologies

From Unknown Worlds (1948)
ASF Anthology (1952)
The Astounding Science Fiction Anthology (1952)
The First Astounding Science Fiction Anthology (1954)
The Second Astounding Science Fiction Anthology (1954)
Astounding Tales of Space and Time (1957)[Reviews]
Prologue to Analog (1962)
Analog 1 (1963)
Analog 2 (1964)
Analog Anthology (1965)
Analog 4 (1966)
Analog 5 (1967)
Analog 7 (1970)
Analog 8 (1971)
Astounding Science Fiction July 1939 (1981)

Magazine Editor

Astounding Stories - 1937 (1937) - Starting with the October issue.
Astounding Science Fiction - 1938 (1938)
Astounding Science Fiction - 1939 (1939)
Unknown - 1939 (1939)
Astounding Science Fiction - 1940 (1940)
Unknown - 1940 (1940)
Astounding Science Fiction - 1941 (1941)
Unknown - 1941 (1941)
Astounding Science Fiction - 1942 (1942)
Unknown - 1942 (1942)
Astounding Science Fiction - 1943 (1943)
Unknown - 1943 (1943)
Astounding Science Fiction - 1944 (1944)
Astounding Science Fiction - 1945 (1945)
Astounding Science Fiction - 1946 (1946)
Astounding Science Fiction - 1947 (1947)
Astounding Science Fiction - 1948 (1948)
Astounding Science Fiction - 1949 (1949)
Astounding Science Fiction - 1950 (1950)
Astounding Science Fiction - 1951 (1951)
Astounding Science Fiction - 1952 (1952)
Astounding Science Fiction - 1953 (1953)
Astounding Science Fiction - 1954 (1954)
Astounding Science Fiction - 1955 (1955)
Astounding Science Fiction - 1956 (1956)
Astounding Science Fiction - 1957 (1957)
Astounding Science Fiction - 1958 (1958)
Astounding Science Fiction - 1959 (1959)
Analog Science Fact -> Fiction - 1960 (1960)
Astounding Science Fact & Fiction - 1960 (1960)
Analog Science Fact -> Fiction - 1961 (1961)
Analog Science Fact -> Science Fiction - 1961 (1961)
Analog Science Fact -> Science Fiction - 1962 (1962)
Analog Science Fact -> Science Fiction - 1963 (1963)
Analog Science Fact -> Science Fiction - 1964 (1964)
Analog Science Fact -> Science Fiction - 1965 (1965)
Analog Science Fact -> Science Fiction - 1966 (1966)
Analog Science Fact -> Science Fiction - 1967 (1967)
Analog Science Fact -> Science Fiction - 1968 (1968)

(Cont.)

(Magazine Editor, cont.)

Analog Science Fiction/Science Fact - 1969 (1969)
Analog Science Fiction/Science Fact - 1970 (1970)
Analog Science Fiction/Science Fact - 1971 (1971)

Short Fiction

The Metal Horde (1930)
The Voice of the Void (1930)
When the Atoms Failed (1930)
The Derelicts of Ganymede (1932)
The Electronic Siege (1932)
The Last Evolution (1932)
Space Rays (1932)
The Battery of Hate (1933)
Atomic Power (1934)[as Don A. Stuart]
Twilight (1934)[as Don A. Stuart]
The Irrelevant (1934)[as Karl van Campen]
Blindness (1935)[as Don A. Stuart]
The Escape (1935)[as Don A. Stuart]
The Invaders (1935)[as Don A. Stuart]
Night (1935)[as Don A. Stuart] - Sequel to "Twilight".
The Brain Stealers of Mars (1936)
The Ultimate Weapon (1936)
Elimination (1936)[as Don A. Stuart]
Frictional Losses (1936)[as Don A. Stuart]
The Double Minds (1937)
The Immortality Seekers (1937)
Other Eyes Watching (1937)
The Tenth World (1937)
Forgetfulness (1937)[as Don A. Stuart]
Out of Night (1937)[as Don A. Stuart]
The Brain Pirates (1938)
Dead Knowledge (1938)[as Don A. Stuart]
Who Goes There? (1938)[as Don A. Stuart]
Planet of Eternal Night (1939)
Cloak of Aesir (1939)[as Don A. Stuart]
The Elder Gods (1939) with A. J. Burks (as Don A. Stuart)

(Cont.)

(Short Fiction, cont.)

The Incredible Planet (1949)
The Infinite Atom (1949)
The Interstellar Search (1949)
The Idealists (1954)
Twilight (1965)
All (1976)
Marooned (1976)
The Space Beyond (1976)
Fantastic Fiction (1981)
No Copying Allowed (1981)

Serials

Beyond the End of Space (Part 1 of 2) (1933)
Beyond the End of Space (Part 2 of 2) (1933)
Conquest of the Planets (Part 1 of 3) (1935)
Conquest of the Planets (Part 2 of 3) (1935)
Conquest of the Planets (Part 3 of 3) (1935)

Essays/Articles

Letter (Amazing Stories, March 1930) (1930)
Letter (Amazing, May 1930) (1930)
Letter (Amazing, September 1930) (1930)
Letter (Amazing Stories, May 1931) (1931)
Letter (Amazing, February 1931) (1931)
Letter (Amazing, March 1931) (1931)
Letter (Amazing Stories, May 1933) (1933)
Otto von Guericke: Phlogiston (1934)
The Double World (1936)
The Single Clue (1936)
Atomic Generator (1937)
Beyond the Life Line (1937)
Bluff (1937)
Cosmic Cactus (1937)

(Cont.)

(Essays/Articles, cont.)

Cosmic Discovery (1937)
Cosmic Gossip (1937)
Interplanetary Dividends (1937)
Other Eyes Watching (1937)
Sleet Storm (1937)
Smallpox of Space (1937)
Weather Report (1937)
Cosmic Ray Shields (1937)[as Arthur McCann]
Stress-Fluid (1937)[as Arthur McCann]
Fantastic Fiction (1938)
Giant Stars (1938)[as Arthur McCann]
Ignition Point (1938)[as Arthur McCann]
Stored Power (1938)[as Arthur McCann]
Addenda (1939)
Numbers Without Meaning (1939)[as Arthur McCann]
Atomic Ringmaster (1940)[as Arthur McCann]
Hot Filament (1940)[as Arthur McCann]
Shhhhh! Don't Mention It! (1940)[as Arthur McCann]
We're Not All Human (1941)
Dead - and Embalmed (1941)[as Arthur McCann]
Gyped! (1941)[as Arthur McCann]
"Those Giant Tubes..." (1943) - This article was actually uncredited.
Master Chemist (1943)[as Arthur McCann]
"There Ain't No Sich Animile!" (1944)
Beachhead for Science (1944)
Editorial: The Difference (1944)
Galaxies of Stars (1944)
Not Quite Rockets (1944)
Problem in Eight Dimensions (1944) - Not actually credited.
Remarkably Absent (1944)
Sledge Hammer! (1944) - Not actually credited.
Spaceship's View (1944) - Not actually credited.
Super-Conservative (1944)
Atoms Won't Do Everything (1945)
Fragile! Glass! (1945) - Uncredited.
Halt! (1945)
The Road to Space (1945)
"- But Are We?" (1946)
Atomic Engines (1946)

(Cont.)

(Essays/Articles, cont.)

Bikini A and B (1946)
Concerning Science Fiction (1946)
The Lead Curtain (1946)
Our Monthly Contest (1946)
Sensory Equipment (1946)
Spanish Atoms (1946)
The Third Great Advance (1946)
Visitor from Beyond (1946) - Uncredited.
Atomic Energy For Peace (1947)
The Atomic Power Plant (1947)
Atomic Weapons - Submicroscopic Scale (1947)
Indifference - Cosmic Scale (1947)
Introduction (Venus Equilateral) (1947)
Editorial: Atomic Power Pile (1948)
Editorial: Brookhaven Laboratories (1948)
Editorial: Educational Problem (1948)
Editorial: Elder Brother Mars (1948)
Editorial: High Speed Pile (1948)
Editorial: Stunted Seedling (1948)
Editorial: The Atomic Secret (1948)
Foreword (From Unknown Worlds) (1948)
Megopolis (1948)
No Copying Allowed (1948)
Undesirable Invention (1948)
Brookhaven Sketches (1949) - designated "The Editor's Page" on contents
page, this is actually an article about the Brookhaven National
Laboratories with illustrations by Hubert Rogers.
Editorial: "Oh King, Live Forever..." (1949)
Editorial: Detection Means Existence (1949)
Editorial: Digital Computer (1949)
Editorial: Gleep and Bepo (1949)
Editorial: Narrow Limits (1949)
Editorial: Open to Question (1949)
Editorial: Parboiled Pilots (1949)
Editorial: Radiation and Mutations (1949)
Editorial: Reactor Research (1949)
Editorial: Science-Fiction Prophecy (1949)
Why I Selected Blindness (1949)
Introduction (The Man Who Sold the Moon) (1950)

(Cont.)

(Essays/Articles, cont.)

Editorial: "Elementry, My Dear Watson!" (1951)
Editorial: Causus Belli (1951)
Editorial: Conservatism (1951)
Editorial: Evaluation of Dianetics (1951)
Editorial: Evolution (1951)
Editorial: Improbable Atmosphere (1951)
Editorial: Megotiation (1951)
Editorial: Nonsecret (1951)
Editorial: Note for Chemists (1951)
Editorial: Primitive Language (1951)
Editorial: Reality (1951)
Editorial: Tools (1951)
Brookhaven Action (1952)
Editorial: Aristotelian Thinking (1952)
Editorial: How Do YOU Think? (1952)
Editorial: In All Probability... (1952)
Editorial: Military Weapon (1952)
Editorial: Nonlinear Phenomenon (1952)
Editorial: Proposed History (1952)
Editorial: Question... (1952)
Editorial: Social Pattern (1952)
Editorial: The Laws of Speculation (1952)
Editorial: The Perfect Machine (1952)
Editorial: The Ultimate Weapon (1952)
Editorial: Uncertainty Principle (1952)
Foreword (From Unknown Worlds) (1952)
Introduction (Cloak of Aesir) (1952)
Introduction (The Astounding Science Fiction Anthology) (1952)
Editorial: "Our Catalogue Number..." (1953)
Editorial: "Postulate an Alien Who--" (1953)
Editorial: "You Know What I Mean..." (1953)
Editorial: Emotional Senses (1953)
Editorial: Redundance (1953)
Editorial: The Fallacy of Null-A (1953)
Editorial: The Scientist (1953)
Editorial: The Villains of the Piece (1953)
Editorial: Thinking Machine (1953)
Editorial: Unsane Behavior (1953)
Editorial: Unwise Knowledge (1953)

(Cont.)

(Essays/Articles, cont.)

Editorial: Window to Tomorrow (1953)
Introduction (The Black Star Passes) (1953)
Editorial: "As A General Rule..." (1954)
Editorial: "My Willie Can Do Anything" (1954)
Editorial: Brain-Washing (1954)
Editorial: Breakthrough (1954)
Editorial: Danger: Men at Work (1954)
Editorial: Hell on Earth (1954)
Editorial: Information on Age (1954)
Editorial: Limitation On Logic (1954)
Editorial: Prediction (1954)
Editorial: Product of Higher Science (1954)
Editorial: Relatively Absolute (1954)
Why I Selected Blindness (1954)
Editorial: A Word for It (1955)
Editorial: Game Theory (1955)
Editorial: Meaning Wanted (1955)
Editorial: Necessary Isn't Sufficient (1955)
Editorial: Philosophy Doesn't Pay (1955)
Editorial: Point of Diminishing Returns (1955)
Editorial: Second-Order Logic? (1955)
Editorial: Subtle Distinction (1955)
Editorial: Technical Unemployment (1955)
Editorial: The Demeaned Viewpoint (1955)
Editorial: The Fanatic (1955)
Editorial: The Liar (1955)
Editorial: Coexistence (1956)
Editorial: I Try to Have An Open Mind (1956)
Editorial: Mathematics of Psychology (1956)
Editorial: Mutation and Cultures (1956)
Editorial: Nothing Fails Like Success (1956)
Editorial: The Group & the Individual (1956)
Editorial: The Invisible River (1956)
Editorial: The Problem of Psionics (1956)
Editorial: The Science of Psionics (1956)
Editorial: The Scientific Method (1956)
Editorial: The Value of Panic (1956)
Editorial: Thought Without Words (1956)
Psionic Machine - Type One (1956)

(Cont.)

(Essays/Articles, cont.)

Addendum on the Symbolic Psionic Machine (1957)
Editorial: A Matter of Degree (1957)
Editorial: But... I Measured It! (1957)
Editorial: Demonstration part 1 (1957)
Editorial: Demonstration (1957)
Editorial: Evolution Without Mutations (1957)
Editorial: Intelligence Amplification (1957)
Editorial: Learning Patterns (1957)
Editorial: Limitation of Method (1957)
Editorial: Situation Normal: Explosive (1957)
Editorial: That Shortage of Scientists (1957)
Editorial: The False Immortals (1957)
Editorial: The One-Eyed Logician (1957)
Unprovable Speculation (1957)
Editorial: "...But Divided We Fall!" (1958)
Editorial: "I Know What You Say..." (1958)
Editorial: Concerning "Science Fans" (1958)
Editorial: Demonstration part 2 (1958)
Editorial: Demonstration part 3 (1958)
Editorial: Hyperdemocracy (1958)
Editorial: Overcompensation (1958)
Editorial: Political Science (1958)
Editorial: Project Me Too! (1958)
Editorial: Research Is Antisocial (1958)
Editorial: Society for Amateurs (1958)
Editorial: The Scientific Method (1958)
Editorial: "We Need A Heuristic..." (1959)
Editorial: "What Do You Mean... Human?" (1959)
Editorial: "What Do You Mean... Human?" (1959)
Editorial: Frontier News (1959)
Editorial: Holes (1959)
Editorial: How to Lose a War (1959)
Editorial: Mr. Newton's Wonderful Discovery (1959)
Editorial: Non-Escape Literature (1959)
Editorial: Science is A Menace (1959)
Editorial: Subjective Color (1959)
Editorial: The Superman (1959)
Editorial: The Ultrafeeble Interactions (1959)
Editorial: We MUST Study Psi (1959)

(Cont.)

(Essays/Articles, cont.)

"They Do It With Mirrors..." (1960)
Color Vision...The Land Experiments (1960)
Editorial: "You Can't Say I Did It!" (1960)
Editorial: "You Must Agree With Me..." (1960)
Editorial: Final Report On the Dean Device (1960)
Editorial: People Need Help (1960)
Editorial: Report on the Dean Drive (1960)
Editorial: Space for Industry (1960)
Editorial: The Literal-Minded Type (1960)
Editorial: The One-Eyed Guide (1960)
Editorial: The Size of the Solar System (1960)
Editorial: The Test (1960)
Editorial: The Word and the Truth (1960)
Editorial: Unimaginable Reasons (1960)
Instrumentation for the Dean Drive (1960)
The Self-Repairing Robot (1960)
Space for Industry (1960)
The Space-Drive Problem (1960)
Editorial: Civil War Centennial (1961)
Editorial: Colonialism (1961)
Editorial: Constitution for Utopia (1961)
Editorial: On the Selective Breeding of Human Beings (1961)
Editorial: Science Fantasy (1961)
Editorial: Scientific Lynch Law (1961)
Editorial: Sometimes You Just Can't Win (1961)
Editorial: Starblinded (1961)
Editorial: The Nature of the Supernatural (1961)
Editorial: The Origins of Science (1961)
Editorial: Tribesman, Barbarian and Citizen (1961)
Pie in the Sky (1961)
Tribesman, Barbarian, and Citizen (1961)
The Unnatural Light (1961)
The Big Job of Moving Little Things (1962)
Editorial: "It Ain't My Job..." (1962)
Editorial: "Maybe It'll Go Away..." (1962)
Editorial: "Three Degrees of Freedom..." (1962)
Editorial: Astrologer-Astronomer-Astro-engineer (1962)
Editorial: Beware of Demons (1962)
Editorial: Crucial Experiment (1962)

(Cont.)

(Essays/Articles, cont.)

Editorial: Deadly Fantasy (1962)
Editorial: How to Get More Than Your Share (1962)
Editorial: In the name of Science (1962)
Editorial: That Fourth Law of Motion (1962)
Editorial: Utopian Voters (1962)
Editorial: What's Wrong With Science (1962)
Introduction (Prologue to Analog) (1962)
Suppress Invention (1962)
Editorial: A Place for the Subconscious (1963)
Editorial: Finagle's Factory (1963)
Editorial: Hydrogen Isn't Cultural (1963)
Editorial: Life Among the Stars (1963)
Editorial: No Acceptable Experiment (1963)
Editorial: Segregation (1963)
Editorial: Sociological Barrier (1963)
Editorial: The International Language (1963)
Editorial: The Lesson of Thalidomide (1963)
Editorial: The Search for Dynamic Stability (1963)
Editorial: UFO: Unidentified Flying Observations (1963)
Editorial: Where Did Everybody Go? (1963)
Introduction (Analog 1) (1963)
Natural Resources In Space (1963)
The Nature of Electric Fluid (1963)
Editorial: "Fully Identified..." (1964)
Editorial: A Counterblast to Tobacco (1964)
Editorial: God Isn't Democratic (1964)
Editorial: How to Breed A Superior Race (1964)
Editorial: Louis Pasteur, Medical Quack (1964)
Editorial: The Barbarian Menace (1964)
Editorial: The End of Colonialism (1964)
Editorial: The Extremist (1964)
Editorial: The Liquid World (1964)
Editorial: The Mobsters (1964)
Editorial: Thoughts After An Assassination (1964)
Editorial: Transphonemator (1964)
Preface (Analog 2) (1964)
The Science of Science Fiction Writing (1964)
The Barbarians Within (1965)
Editorial: "Hyperinfracaniphilia" (1965)

(Cont.)

(Essays/Articles, cont.)

Editorial: Time for America (1965)
Introduction (Analog 3) (1965)
Introduction (Analog Anthology) (1965)
Introduction (Analog Anthology) (1965)
Preface (Analog Anthology) (1965)
Introduction (A Robert Heinlein Omnibus) (1966)
Science Fact: The Psychoceramic (1966)
Science Fact: Titanium / The Wonder Metal (1966) - This article was actually uncredited.
"Scientists Are Stupid!" (1967)
Science Fact: Annual Report (1967)
Science Fact: For UFO Analyzers (1967) - This article was actually uncredited.
Science Fact: Political Science - Chinese Style (1967)
Editorial: Long Delayed Recognition (1968)
Editorial: The Simple Way (1969)
In Memoriam - Bernard I. Kahn (1969)
Political Science - Mark II (1969)
Political Science-Mark II (1969)
Some Like It Hot, Some Like It Cold (1970)
Portfolio: Wesso - Islands of Space (1972)
The Editor's Page (1990)

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Appendix D

Dean Drive Narration from the DVD

This video entry in the Special Features menu provides detail about one of John W. Campbell's "pet" (non-standard) scientific theories.

One of the many non-standard scientific concepts that John W. Campbell championed in the pages of *Astounding* and *Analog*, was that of the Dean Drive. Developed by Norman L. Dean and patented in 1959, the "Dean System Drive" was a motor driven device also known as the "Space Drive" or "Inertial Drive".

Mr. Dean designed a rotary, variable oscillator engine, employing sequential clutching and/or camming action to convert rotary motion into unidirectional motion. John W. Campbell wrote in 1961 that... "Dean's device, for instance, now appears to be the first application of the Fourth Law of Motion. Who ever proved that Newton discovered all the Laws of Motion, huh?" Beyond the pages of Campbell's magazine, in the early 1960's the Dean Drive received attention from such diverse sources as Dave Garroway's "Today" show and the U.S. Air Force Office of Scientific Research.

Despite derision by critics as a futile attempt to defy Newtonian Laws of Motion, proponents of the Dean Drive remain convinced of its potential. James E. Cox, editor of "Anti-Gravity News" and a self-styled Inertial Engine Engineer, has provided the videotapes you are now watching, in his personal effort to vindicate Dean.

In this demonstration, an inertial drive transmits apparent thrust energy, and pushes a heavy book across a glass surface.

In this example, an inertial drive is suspended from a scale with digital readout. The weight of the device is well over 12 pounds. Once activated, the net apparent force of this device lowers the strain, or weight hanging on the scale, to under 6 pounds.

(Cont.)

(Dean Drive Narration, cont.)

In another demonstration, a large 20 pound drive rests upon a common household scale. After power-up, the net apparent force of the device lowers the weight registered on the scale by 6 or more pounds.

Eventually, John W. Campbell wrote that "it is essentially unimportant whether or not Dean's device works... but that the space drive problem still deserves adequate study."

Appendix E

Barry Malzberg's Favorite Issues of *Astounding/Analog*

[**July '39**] What this issue means to me is the official beginning of the great Campbell era: first issue of the so-called Golden Age, first published stories of Van Vogt and Asimov.

This is **January '46**; and this of course was the Timmins cover of the two-part novella "The Fairy Chessmen" by Kuttner and Moore, which issue I found in 1952 prowling Stephens Back Issue Book Service at Astor Place, in New York. This issue symbolizes the wonder, the mystery, the terror, and the very – all the variegated colors of science fiction.

This was the great **May 1947** issue. If there is such a thing as a best issue of *Astounding* – which is like saying, a best Beethoven symphony, or a best Mozart opera – this may be the best single issue of *Astounding*, with T. L. Sherred's magnificent first story, "E For Effort"; with "Tiny And the Monster" by Sturgeon, which was swiped by Spielberg entire for *ET*; with the sardonic "Jesting Pilot", one of the earlier and most memorable of the anti-bomb stories; and with the great Rogers cover for the Kuttner and Moore serial *Fury*.

This **September '47** issue means much to me not because of the Hubbard serial, the middle part of which, *The End*, has not yet appeared, but because the cover – Alejandro Canedo's picture of a naked man seen from the rear, in blue, surrounded by lightning bolts, was the first of Alejandro's surrealistic, symbolic covers. A very un-Campbellian piece of illustration. And I thought it was terrific.

[**December '47**] This issue is a particularly striking cover, again by Alejandro Canedo. A beautiful illustration of a robot against a background. It was the cover illustration for Simak's "Aesop", which was the last of the *City* series. It was the last of the seven connected novelettes which were later collected and published as *City*, and which won I think the first

International Fantasy Award. The cover is striking. The novelette no less so.

This is **October '48**. This is the Rogers cover for the Van Vogt *Players of Null A*, a fine and crazy sequel to the fine and crazy *World of Null A*, which had appeared there three years earlier. This is the man in his red underwear: this is Gosseyn, Gilbert Gosseyn, the protagonist, in his red underwear, confronting the incomprehensibility of it all and doing, and doing so strikingly. It also has the only collaboration that I know of James Blish and Damon Knight, "Tiger Ride", which I think is very good; and Sturgeon's grim and political "Unite and Conquer", which was appropriated by many writers. But it's the man in his red underwear which stays with me.

[**January '49**] This is the Rogers cover for "Private Eye" by Kuttner. The red background, the one huge eye superimposed on the red background. I think "The Private Eye" is possibly the best novelette *Astounding* ever published – certainly ever published in that decade. And it is an outstandingly grim and technophobic study of the time viewer as jurisprudence. And I could – I could explicate on that novelette for a long time, but it's truly impressive work. One of the finest pieces of writing to come out of the time.

[**June '49**] What this has is the conclusion of Hal Clement's only good work, which is the two-part serial *Needle*, which is a, the first – probably Asimov to the contrary – the first true science fiction detective novel. And it's excellent.

The **July '49** issue is Hubert Rogers' photographic painting of the Brookhaven atomic energy installation, which was opened or was shortly to be opened. And if ever there was a cover which would give comfort to those who felt that Campbell was a raving technophile, it was this – it was atomic energy as the clean and sweeping force of the future, which would frame the planet and would give all of us comfortable lives. It was a celebratory cover and a celebratory article, really public-relations. It could've been written by the Atomic Energy Commission as a PR piece.

[**February '50**] That is the Rogers cover for L. Ron Hubbard's *To The Stars*, certainly his best work, his best book-length work; and a wonderful cover of a space service officer in uniform looking very unhappy, as well he should. This was the issue of Cleve Cartmill's "Number Nine", which in

the same misguided attempt to convert one's parents, experienced by every science fiction-reading kid, I gave to my mother and said, "Read this. See, you can read this. This is easy to read; it's not off-putting." She couldn't read it. She understood it. She hated it.

[October '50] This is Cartier's only cover for *Astounding*. He was an interior artist and a great one, and always in the magazine between '48 and '53, when he quit and got himself a job and quit science fiction illustration. Although he did many covers for *Unknown*. This is the only cover for *Astounding*, for "The Hand of Zei" by Sprague De Camp. And it's a wonderful cover.

October '53 is Kelly Freas' first cover for *Astounding*, illustrating Tom Godwin's first story, first published story, "The Gulf Between". It's a famous cover of an enormous robot holding in one claw-like hand the bloodied form of an adult male, looking with great grief past the corpse he is holding. The English rock group Queen used this; and it's been reproduced endlessly.

It was **November of '53**, and it was the United Nations as seen through John Campbell's window at the old Street & Smith offices, which at that time were on 42nd Street between 3rd and Lexington. And the view was east to the river and the UN building. The UN could be seen as a shining symbol of science leading toward a glorious future.

September '59 – this is Kelly Freas' wonderful cover for *That Sweet Little Old Lady*, the first of three novels which Garrett and Lawrence Jannifer wrote under the pseudonym Mark Phillips for *Astounding*. This is a cover of John Jay Malone, their protagonist, whose problem is to find a telepathic spy. And one of the ways he tried to solve the problem was to dress as King Henry VIII in full court costume. Freas' cover depicts Malone, a very unhappy Malone, dressed splendidly as Henry VIII. It's a cover of endless wit and resonance. When Freas was interested – and he got less interested as he became more successful – he was very, very good.

This is Schoenherr, who later won a Caldicott for illustrations. And he did all of the illustrations for all of the *Dune* novels – this issue, **December '63**, being the Schoenherr cover for the first installment of *Dune*. And it's a really impressive cover. And the novel, of course, is, as they say in the Academy, the novel is seminal.

Appendix F

Obituary from The New York Times

Publication Date: July 13, 1971

Page: 36

John W. Campbell of Analog Science Magazine, Dead at 61. Writer and Anthologist was Credited with Transforming Fiction and Fact Journal.

MOUNTAINSIDE, N.J., July 12 - John W. Campbell, editor of Analog, a leading science fiction and fact magazine, who was also a writer and anthologist, died yesterday of a heart ailment at his home, 1457 Orchard Road. His age was 61.

Influence On the Field

"No other man has had so profound an influence on the development of modern science fiction as John W. Campbell," the late Anthony Boucher wrote in The New York Times Book Review in 1967.

"Mr. Campbell," Boucher said, "developed a truly astounding stable of writers - Robert A. Heinlein, A. E. Van Vogt, L. Sprague de Camp, Theodore Sturgeon, and many others - who brought science fiction out of the era of gadgetry and converged it into a vehicle for mature speculation, not only about science but about people."

Mr. Campbell had been editor of Analog (formerly called Astounding Science Fiction) for 34 years. He began when the magazine was an adventure pulp and transformed it into a respected specialized publication with a heavy readership among engineers and scientists.

His magazine had won the Hugo Award nine times since 1953 as the best science-fiction magazine of the year. In 1970 Mr. Campbell gained entry into the Science Fiction Hall of Fame, an honored award by a committee of writers and readers of science fiction, called First Fandom, for his contributions to science fiction.

(Cont.)

(Obituary, cont.)

Before he became editor in 1937, Mr. Campbell was a leading writer of science fiction. The motion picture, *The Thing From Outer Space*, was made from his 1938 novelette "Who Goes There?"

Mr. Campbell, a brawny, crew-cut, 6 footer, predicted editorially in 1939 that atomic energy would come about through the release of the energy in Uranium 235.

Predicted Bigger Bomb

In 1945, after the United States dropped its first atom bomb, he predicted that the next big weapon would be powered by hydrogen.

During World War II, his stories on atomic energy were so specific and accurate that the Federal Bureau of Investigation swooped down on him. They decided, however, to let him continue publishing his predictions since discontinuance would arouse suspicion.

In his monthly publication Mr. Campbell offered an editorial on one of his pet theories, many of which were controversial. A favorite subject was what he considered society's tendency to subvert democracy by overdoing things.

"Our present cultural pattern is dominated by the concepts of 'togetherness,' conformity, hyper democracy, and a general nitwitted 'everybody's equal to everybody' philosophy," he once wrote. "In the evolution of organic life - a billion years ago - there was a real honest-to-God, egalitarian organization of individuals. We called them slime molds; every cell was equal to every other cell. They continue to exist, of course, in out of the way places, under damp and rotting logs, and so on. But they do not appear to have achieved any notable accomplishment."

Another favorite cause was the importance of the amateur. Professional scientists, in his opinion, were apt to think along established lines too often to make break-throughs in their fields.

Mr. Campbell was born in Newark on June 8, 1910, the son of an electrical engineer, who interested him in science at the age of 3. He attended the Massachusetts Institute of Technology and received a B.S. degree in physics from Duke University.

(Cont.)

(Obituary, cont.)

He started to write science fiction during the Depression and soon came to the fore-front of the field. The result was that when an editor was sought in 1937 for Astounding Stories, predecessor on Analog, he got the job.

He was the author of "The Atomic Story," an account of the development of atomic energy, published in 1947. Annually he anthologized the best stories of Analog.

Surviving are his widow, Margaret; three daughters, Mrs. James Hammond, Mrs. James Randazzo and Mrs. Ian Roberston; a sister, Mrs. William Krieg; and two grandchildren.

A memorial service will be held Wednesday at 11 A.M. at the Gray Funeral Home in Westfield, N.J.

Appendix G

Glossary of Terms from the Transcript

“Alexander The Bait” by Phil Klass and/or William Tenn: Tenn's first published story, accepted by John W. Campbell's *Astounding* in 1946. Visionary in its depiction of the institutional development of space travel (moon exploration), this story also hints at the author's great wit, widely revealed in his subsequent work.

Amazing Stories magazine: "The Magazine of Scientifiction", founded by Hugo Gernsback in April, 1926. Credited with the creation of SF as a distinct genre within popular magazine fiction (in English). Early issues often had reprints of stories by Jules Verne, H.G. Wells and Edgar Allen Poe. By the late 1920's, "space opera" stories, notably the *Buck Rogers in the 25th Century* and *The Skylark of Space* serials, became quite popular. Amazing's primacy was soon surpassed by *Astounding Stories*, a rival whose higher pay rates (per word) soon attracted the top writers. Through many incarnations (Gernsback lost control of the publication in 1929), Amazing survived far longer than most of her peers - until the end of the 20th century.

Isaac Asimov: With Heinlein, Asimov stands as the greatest names in the pantheon of science fiction writers. Discovering SF in his youth among the magazine racks of his parent's candy store in Brooklyn, Ike became a truly prolific writer of not only SF, but popular science, history, and practically any subject that called him during his lifetime, eventually completing over 400 books. Asimov was a trained scientist with an eidetic memory, and an associate professor at Boston University School of Medicine until he moved back to New York and pursued writing full time. He not only brought a scientist's sensibility to his work, but a strong sense of social justice (he was a president of the American Humanist Association), a keen love of puzzles (he was a regular member of the mystery loving social club, The Baker Street Irregulars), and an appreciation of our larger culture (he could launch into Gilbert and Sullivan at the drop of a hat). He died of AIDS in 1992, the result of a tainted blood transfusion during heart bypass surgery, years earlier. Please also see Asimov in the Author Biography section.

Gregory Benford: Physicist and hard SF author Benford won the Nebula and John W. Campbell Memorial Awards for the novel, *Timescape* (1980), in which scientists try to transmit messages through time. Other notable Benford titles include *Artifact* (1985) and the story collection, *In Alien Flesh* (1986).

Bill the Galactic Hero by Harry Harrison (1965): Harrison's knowing, humorous skewering of the army experience (and of Robert A. Heinlein's "gung-ho" stories).

James E. Cox: For additional information about Mr. Cox, Anti-Gravity News, and the "Dean Drive", please link to: <http://www.padrak.com/agn>

Cleve Cartmill: Inventor, journalist and writer, Cartmill was first published with the story "Oscar" in *Unknown* (1941). Most prolific during the 1940's, Mr. Cartmill is perhaps best known for writing the predictive atomic bomb story "Deadline" for John W. Campbell and *Astounding* in 1944 (prompting an FBI investigation as to its source).

Dean Drive: A rotary, variable oscillator engine, employing sequential clutching and/or camming action to convert rotary motion into unidirectional motion. Please see DEAN DRIVE in the Special Features module appendix.

Norman L. Dean: A mortgage expert at the Federal Housing Administration, Mr. Dean was a Washington, D.C. area "leisure-time" inventor and physicist. In the early 1950's, Dean had an idea for a "rectified centrifugal force space drive". That idea, once developed (at a cost of \$100,00 of his own money), became known as the "Dean Drive". Frustrated by what he believed were biased tests conducted by the Air Force, and unwilling to sell the development rights or his patent, Mr. Dean moved to England in 1968. It was there in 1972, working with business interests on the design for a new patent, that Dean died before his dreams came to fruition.

Deathworld by Harry Harrison (1960): Harrison's adventure novel (actually a series of three) that describes the challenges of colonizing a planet populated almost entirely by hostile flora and fauna, that evolve to ever greater and more focused aggressiveness in response to the actions the books' protagonist.

Lester del Rey: SFWA Grand Master del Rey was "discovered" by John W. Campbell with Astounding's publication of "The Faithful" in 1938, followed by submissions over the next decade, including the excellent "Nerves" (Astounding, 1942). From the 1950's onward, del Rey also worked editing magazines, anthologies and books, as well as continuing to write in a variety of formats - collaborating on some stories with Frederik Pohl. In 1977, Del Rey Books, an imprint of Ballantine (Random House) was founded to recognize the great success of the SF and fantasy writers developed by editors Judy-Lynn and Lester del Rey.

Dianetics: "The Science of the Mind". A form of psychotherapy developed by L. Ron Hubbard, a SF and fantasy magazine writer, in the 1940's. In the May, 1950 issue of Astounding, Hubbard's article on Dianetics suggested essentially that by clearing the mind of traumas, including those of previous incarnations, one could enable the dormant "superman" within us all. After a split with the Dianetics Foundation in 1952, Hubbard formed the Founding Church of Scientology in 1955.

Dowsing: To search for water, etc. with a dowsing or divining rod (a forked branch popularly asserted to locate underground water or metal).

The Dragon In The Sea / Under Pressure: Frank Herbert's good early novel, published first in Astounding as *Under Pressure* (1955), and later as the novel *The Dragon In The Sea* (1956). This tale was a taut thriller set aboard a futuristic submarine.

Dune: Title book of Frank Herbert's blockbuster, six novel series, dealing with themes such as intergalactic politics, messianic religion and ecology - centered on the desert planet Arrakis. *Dune* was the 1965 fixup title of the co-joined *Dune World* and *The Prophet of Dune* (Astounding 1963-4, 1965). *Dune*, arguably one of the most well-known works in SF, won the first Nebula Award for Best Novel and shared the Hugo.

Extrasensory Perception (ESP): Capabilities beyond the range of normal sensory experience such as clairvoyance and telepathy. Studied scientifically as "parapsychology" by Dr. J. B. Rhine and others, ESP is also a common SF theme.

Fourth Law of Motion, The: A theory proposed by Dr. William O. Davis in the May, 1962 issue of Analog (Vol. 69, #3). This treatise attempts to explain anomalies in physics allowing for a "reactionless" (action not simultaneous to reaction) device such as the Dean Drive. See also

"Some Aspects of Certain Transient Mechanical Systems", American Physical Society Paper FA10, April, 1962 Spring Meeting.

Foundation, stories by Isaac Asimov (1942-50): *The Foundation Trilogy* (1963) was not quite three novels, each one having been composed of separate short stories, and neither was it a trilogy, ultimately gaining additional parts many years after their initial appearance, some by Asimov and by different writers after his death. Foundation begins the SF strategy of creating a unique and logical universe within which stories unfold over many generations. Inspired by Gibbon's "Rise and Fall of the Roman Empire," Asimov creates his own science, psychohistory, that throughout the work, suggests the actions of societies can be logically extrapolated.

(Frank) Kelly Freas: Probably the most famous SF artist, known for his voluminous catalogue of striking magazine cover art, as well as his excellent interior work.

Future History, stories by Robert A. Heinlein (1939-50): With a nod to Asimov's earlier work, Heinlein wrote a rich and believable sequence, including novels and short stories, that takes us from practically his own present day, to about seven hundred years in the future. Early in the work, Heinlein had already charted and revealed the course of stories not yet completed, ultimately taking us through technological innovations, social upheavals, and outward to the stars. Important milestones in the series include *The Man Who Sold the Moon* (1950), *Methuselah's Children* (1941), and *Orphans of the Sky* (1941).

Galaxy Science Fiction: First published as a bi-monthly and later monthly digest (October 1959-1980), Galaxy soon joined Astounding and The Magazine of Fantasy and Science Fiction as the best of the SF magazines. Original editor H. L. Gold chose a new direction for his magazine and featured stories concerned with themes such as sociology, psychology and humor. Frederik Pohl succeeded Gold as editor in December, 1961. Notable stories include Alfred Bester's *The Demolished Man* in 1952, and Ray Bradbury's *The Fireman* in 1951 (*Fahrenheit 451*, 1953).

Dave Garroway: Former jazz radio personality who became the first television variety show host with "Garroway At Large". In 1952,

Garroway originated NBC-TV's "Today" show - the quintessential morning program.

Randall Garrett: A prolific short story writer, Randall Garrett was often published in Campbell's *Astounding*. Although a frequent collaborator with other writers such as Robert Silverberg and Laurence M. Janifer (often as Mark Phillips), Garrett wrote a strong series for *Analog* featuring the exploits of an alternate world detective, gathered complete as *Lord Darcy* (1983).

Hugo Gernsback: Often called the father of magazine SF, Gernsback was a big fan of radio and founded his first magazine, *Modern Electronics*, in 1908. That magazine regularly printed SF stories, including Gernsback's own novel, *Ralph 124C 41+* (1911-12; fixup 1925). In 1926, Gernsback founded *Amazing Stories* - the first true SF magazine (in English). The annual Science Fiction Achievement Awards are called Hugos to honor Gernsback's contribution to SF.

William Gibson: This visionary novelist emerged from cyberpunk (which, along with Bruce Sterling, he is generally credited with originating) to mainstream success, including significant multi-book contracts and movie deals. In his early work, the prose evokes the noir detective genre, at the same time conjuring a convincingly chaotic world of monolithic corporations and a radicalized technical class, both struggling for power and control in an increasingly chaotic and economically polarized society.

Golden Age of Science Fiction: A consensus reference to a historical period of magazine SF, beginning from 1938, when John W. Campbell's sole editorship of *Astounding* was firmly established. There is less than a clear consensus about how long it lasted, schools of thought varying from four or five years, to as many as a dozen, when in 1950 two strong rivals with unique points of view, the *Magazine of Fantasy & SF*, and *Galaxy SF* both established themselves with regular publication.

"The Golden Age of SF" has also been said to be 13 years old - a sarcastic swipe at adolescent fandom.

Grand Hotel: 1932 classic film, adapted from a Vicki Baum novel and directed by Edmund Goulding. Captive character's lives intertwine over 24 hours in a Berlin hotel setting. The film featured depressed ballerina Garbo's famous line "...I want to be alone."

Robert A. Heinlein: Heinlein was Campbell's biggest "discovery," and the pre-eminent writer in the field from his first few works, until at least 1966, with the publication of "The Moon is a Harsh Mistress." His storytelling was constantly gripping, his characters and backgrounds always convincing, and his world view reflected America's postwar strength and politics, but with a strong libertarian cast. He is credited as the first pulp SF writer to make it into the slick magazines, when his "Green Hills of Earth" (1947), was featured in the Saturday Evening Post, and the first to have creative input in Hollywood, with the first "realistic" space adventure, "Destination Moon."

Frank Herbert: A newspaper reporter prior to writing SF full-time, Herbert was first published in Startling Stories in 1952, with sporadic story publication through that decade. His real breakthrough came with the publication of *Dune World* in Astounding (1963-4), which, in its 1965 fixup form, won the first Nebula Award for Best Novel. The hugely successful, six novel *Dune* series cemented Herbert's legacy as a major SF figure.

Hieronymous Machine: A device that allegedly harnesses something called "eloptic radiation" to detect and analyze minerals. Emissions provide a range of tactile sensation outputs. Named after its inventor, T. G. Hieronymous, this patented machine (U.S. #2,482,773) was offered up by John W. Campbell (Astounding June, 1956) as the kind of "psionic machine" experiment that should stimulate further inquiry.

L. Ron Hubbard: A professional pulp writer for many magazines and in many genres including SF and Fantasy, Hubbard is perhaps best known as the founder of Dianetics and later The Church of Scientology. Published early in John W. Campbell's tenure at Astounding with "The Dangerous Dimension" (1938), Hubbard was a frequent contributor. Some of his work for the magazine, such as *Final Blackout* (1940) and "Return to Tomorrow" (1950) is quite memorable. Many of his best fantasy stories, including "Slaves of Sleep" and "Masters of Sleep", were published by Campbell in Unknown magazine. Also notable from his work for Unknown is the story "Typewriter in the Sky" (1940).

Cyril Kornbluth: A "Futurian" who emerged from that fandom to become one of the greatest short story writers of his time - stories often told with dark humor. Known also for his many collaborations, particularly with Frederik Pohl. Kornbluth died young, at age 34, of a heart attack.

Henry Kuttner & C. L. Moore: A talented, humorous and versatile writer, Kuttner published early fantasy and SF work in magazines such as *Weird Tales* and *Thrilling Wonder Stories* - much of it under pseudonyms. After marrying C. L. Moore in 1940, the two collaborated on many stories, eventually earning a position in Campbell's Astounding stable of writers (most often as Lewis Padgett or Lawrence O'Donnell). Notable work for Astounding includes "The Fairy Chessmen" (1946) and the serial *Fury* (1947). In later writing for *Startling Stories* and *Galaxy*, Kuttner & Moore developed a decidedly "science-fantasy" bent. Henry Kuttner died young, at age 44, of a heart attack.

Ursula LeGuin: One of the genre's pre-eminent writers, Ms. LeGuin's work is even listed in Harold Bloom's "The Western Canon." She has often (but not exclusively) explored feminist issues, using the extrapolation only SF offers to challenge our understanding of present day earthly gender roles. An elegant stylist and provocative essayist, her every new work is anxiously anticipated by a wide and loyal audience.

Fritz Leiber: This SFWA Grand Master is best known for his heroic-fantasy writing (Leiber invented the term "sword & sorcery" to describe the sub-genre), particularly for the many adventures of *Fafhrd and the Gray Mouser*. First published in *Unknown* with the *Fafhrd* story "Two Sought Adventure" (1939), Leiber was still writing high quality stories forty years later. Winner of 6 Hugos and 4 Nebulas, some of Leiber's notable SF titles include, *The Big Time* (*Galaxy*, 1958) and his epic disaster novel, *The Wanderer* (1964).

Lifeboat (The Lifeship): 1944 classic Hitchcock film is derived from a John Steinbeck story. WWII setting, as torpedoed freighter survivors take a stranded Nazi aboard their small lifeboat. Set piece drama unfolds as the lifeboat's occupants struggle to control their destiny. *The Lifeship* (1976) is the title of Harrison & Dickson's SF novel version - written with input from their lunch with JWC.

"The Little Black Bag" by C. M. Kornbluth (1950): Kornbluth's classic story featuring a washed-up doctor and a time traveling medical kit, is an indictment of humanity in both the present and the future .

Magazine of Fantasy and Science Fiction, The: Originally a quarterly, then published bi-monthly (February, 1951) and monthly (August, 1952), *Fantasy and Science Fiction* won eight Hugos for best magazine

between 1958 and 1972. By publishing primarily short stories and abandoning the "pulp" mentality, Fantasy and Science Fiction strove to match the higher literary standards of the "slicks". Isaac Asimov contributed a monthly science feature to the magazine for over 30 years.

Needle by Hal Clement: Clement's first novel, published in *Astounding* (1949). *Needle's* unique plot deals with an alien "detective" who must work with a human boy to catch an alien criminal (and save the boy's father).

Larry Niven: The crop of hard SF writers who emerged during the 1980's & 90's owe much to Mr. Niven. From the early 1960's onward, Niven's *Tales of Known Space* sequence has been seminal. *Ringworld* (1970) is perhaps the best known novel of *Known Space*, with collections such as *Neutron Star* (1968) illustrating his incredibly rich vision of future human and alien interaction.

Nova by Samuel R. Delany (1968): Delany's *Nova*, concatenates the myth of Prometheus and the Grail quest, into a powerful space opera. With a black protagonist (nearly a first in SF) leading the adventure, Delany takes us to the core of an exploding star and back, all the while exploring man.

Psionics: A term originating in the 1950's, describing physical and perceptual psi powers (see also ESP and Dr. Rhine), coined by John W. Campbell as mixing the words "psychic electronics" - and heavily promoted in *Astounding*. Typical psionic abilities, which might evolve or be cultivated include telekinesis and teleportation. Psi powers have served as the basis for many SF stories.

Pulp magazines: A term with several connotations, of which the most simple describes magazines printed on cheap, wood pulp paper (as opposed to coated "slick" paper). The SF pulps were an small offshoot of the general-fiction magazine market, beginning with Hugo Gernsback's *Amazing Stories* (April, 1926). "Pulp SF" often refers derogatorily to the (perceived) lower quality of cheaply bought, swiftly written stories - short on character and long on formulaic action.

Dr. J. B. Rhine: Pioneering multidisciplinary scientific researcher in the fields of parapsychology, psi powers and extrasensory perception (ESP). Dr. Rhine published his early work, "Extra-Sensory Perception", in 1934. The Rhine Research Center at Duke University

continues his investigations. A wealth of information is available online at their website - <http://www.rhine.org>

"Shaver" Mysteries: Written by Richard Shaver for *Amazing Stories* (1945-7) as fact-based articles concerning the ESP control of humans by underground dwelling, conspiratorial, "detrimental robots". Immensely popular, as well as controversial, these stories pumped-up *Amazing's* circulation during this period.

Slush Pile: A collection of unsolicited manuscripts, regardless of the status of the writer (although usually referring to unpublished authors).

E. E. "Doc" Smith and the *Lensman* series: A food chemist whose specialty was doughnut mixes, Edward E. Smith, PhD. began writing his *Skylark* series in 1915. First appearing in Gernsback's *Amazing* with *The Skylark of Space* (1928), Smith would become known as the "father of space opera" and one of the most influential writers of pulp SF. "Doc" Smith is best known for the *Lensman* series of tales, actually a gargantuan novel depicting the Universe's hierarchies, divided for publication in *Astounding* from 1937-48. This series, perhaps the ultimate space opera (later published as 6 novels), describes an epic struggle between the Arisians and the Eddorians. It introduces Galactic Patrol heroes, such as protagonist Kim Kinnison and his heirs, who must utilize the powers of the Lens bracelet to (eventually) defeat Evil.

Street & Smith Publications: One of the older - and more successful - of the early magazine publishing houses, and an early proponent of "genre-ism". Street & Smith acquired *Astounding Stories* in 1933, and by paying top dollar, attracted talented writers. S & S were the publishers of *Astounding* through most of John W. Campbell's career as editor, eventually ceasing in 1961. Conde Nast then bought and published *Astounding*, starting with the February 1961 issue.

Theodore Sturgeon: The author of dozens of classic short stories: "Microcosmic God" (1941), "Thunder and Roses" (1947), "The Man Who Lost the Sea" (1959), among many others, and few novels - Ted Sturgeon was perhaps SF's first "literary" writer. He became a significant cultural figure in the early 1960's with the widening popularity of "More Than Human" (1953), in which six discarded children with unique psionic powers combine to become, in effect, one complete and powerful being. Sturgeon was particularly concerned with

the subject of “love”, both emotional and physical throughout his career. He is also known for what is called Sturgeon’s Law, that states “95% of everything is mediocre,” and the catchphrase he adopted in his later years, “Ask the next question.”

Catherine "Kay" Tarrant: John W. Campbell's longtime associate editor at Astounding and Analog. Tarrant carried a reputation as being the censor of the magazine. In *Prologue To Analog* (1962), John W. Campbell dedicated that anthology "To Kay Tarrant, who has done more for science fiction than anyone realizes".

Edward Teller: Director Emeritus of the Lawrence Livermore Laboratory, in 1943 Edward Teller was head of the Theoretical Physics division at Los Alamos. A major proponent of the "Super" or hydrogen bomb, Teller is an advocate for the development of nuclear capabilities, as well as for the creation of an anti-ballistic missile shield.

F. Orlin Tremaine: Early SF magazine writer and editor, first published in *Weird Tales* in 1926. Tremaine became editor of *Astounding Stories* after its purchase by Street & Smith Publications in 1933. The 50 issues of *Astounding* that he edited, raised the magazine into a commanding market position, and set the stage for John W. Campbell and the "Golden Age of SF."

A. E. van Vogt: This Canadian writer has been an inspiration to many with the incredible dream like logic and scope of his fiction. While his stories did not always tie themselves up into logical bundles by their conclusion, they were always fast paced and compelling. Van (as he was often called) paid his dues, working through the full range of pulp fiction, from romances to cowboy tales, guided by his own dictum, that a writer should build up to a climax every 800 or so words. His first published novel, *Slan* (1940 *Astounding*), is the keystone of science fiction superman stories, and the adopted code for SF fans’ sense of self - “Fans are Slans.” Among the many writers who claimed him as a direct inspiration was Philip K. Dick.

Who Goes There? by John W. Campbell, Jr.: Campbell's classic SF horror story, which served as the basis for 2 films, both entitled "The Thing" (1951, 1982). *Who Goes There?*, first published in *Astounding* (1938, as Don A. Stuart), was both the highlight and the end of JWC's story writing career, as he assumed editorship of the magazine.

Joe (Joseph) Winter, M.D.: As J. A. Winter, M.D., an occasional contributor to *Astounding* from 1948-53. Dr. Winter wrote *Expedition Mercy* and *Expedition Polychrome* (1948-49), adventure tales with a physician hero.

Appendix H

Text of Author Biographies from the DVD

The original DVD biographical sketches were constrained by screen size to limited space for text, and were therefore quite abbreviated. We have retained most of the original material, though in some cases have slightly modified or expanded it.

Brian Aldiss - This writer, full of incomparable notions, has applied his considerable literary skill to an amazing array of distinctive works, as he reappraises the entire genre. *Hothouse* (1962), *Greybeard* (1964), the *Helliconia* series (1982-5), and *Trillion Year Spree* (1986) are required reading.

Isaac Asimov - Asimov was probably the single biggest name in science fiction. In 1941 he published SF's most celebrated story, "Nightfall" in Campbell's *Astounding*, as he did with *Foundation* in 1942. Together, the two men arrived at the famous three laws of robotics, and maintained a friendship and ongoing correspondence until Campbell's death.

Greg Bear - Producing some of the hardest hard SF, Greg Bear is a polished and versatile writer at home on the extreme edges of science and technology, be it the microscopic intelligence of *Blood Music* (1985), or the concatenation of space and time in *Eon* (1985).

Ben Bova - Dr. Bova was the technical editor on Project Vanguard, the first American artificial satellite program and a writer, before he succeeded John Campbell as editor of *Analog* in 1971. A prolific writer of both fiction and scientific non-fiction, try his novels *Millennium* (1976), or the hilarious *The Starcrossed* (1975)..

Hal Clement (Harry Stubbs) - Clement is the archetypal Campbell writer. He is a high school science teacher in Massachusetts, a painter and the creator of the most strenuously and plausibly conceived worlds. The author of the classic, *Mission of Gravity* (1954), he has great affection for his novel *Still River* (1987).

John Clute - John Clute is arguably science fiction's leading critic, and the author of *Appleseed* (2001). His *Encyclopedia of Science Fiction* is the genre's definitive reference work.

Samuel R. Delany -Mr. Delany is the groundbreaking, multiple award winning author of the million selling *Dhalgren* (1975). He is also the author of *Nova* (1968), *Babel 17* (1966), plus an assortment of fantasy, pornography, autobiography and wide ranging criticism. To his regret, he has never published fiction in Analog.

Gordon R. Dickson - A friend of, and frequent collaborator with fellow Minnesotan, seminal hard SF writer Poul Anderson. Dickson is known for his *Childe Cycle*, a future history that follows man's evolution towards superman, and includes his *Dorsai* novels and stories. We also suggest *The Way of the Pilgrim* (1987).

Thomas M. Disch - A leading light of SF's New Wave at the beginning of his career, Tom Disch has mastered multiple genres with his strong and distinct voice. Major works include *The Genocides* (1965), *Camp Concentration* (1968), and *334* (1972).

Philip José Farmer - This science fiction Grand Master broke the barrier against sex between human and alien with his first published story, "The Lovers" (1952). He has continued to break barriers throughout his career with novels like *Flesh* (1960), *A Feast Unknown* (1969), and stories like "Riders of the Purple Wage" (1967).

James Gunn - Jim is still an Analog writer, even as he continues in retirement to lead the nation's premier SF program (which he created), the Center for the Study of Science Fiction at the University of Kansas. He is the author of *The Listeners* (1972) and *The Immortals* (1962), and editor of the massive *Road to Science Fiction* anthologies.

Harry Harrison - Artist, author, editor, toastmaster, and gracious host, he resides in Ireland, Brighton on the Sea and Southern California, simultaneously. Milestones include *Make Room, Make Room* (1966), *Bill, The Galactic Hero* (1965) and *The Stainless Steel Rat* (1961).

Phil Klass and/or William Tenn - A short story writer of the first order, he consistently produced classic tales of intense irony, tragic humor and perfectly controlled tone and finish. Besides his Swiftian novel, *Of Men and Monsters* (1968), do not miss "The Liberation of Earth" (1953), "Child's Play" (1947) or "Bernie the Faust" (1963).

Katherine MacLean - Ms. MacLean is known for her rigorous science, and carefully developed story structure. She stands out among SF writers for her sensitivity to psychology and the social sciences. She has often been associated with Astounding, publishing many of her stories there, including her first, "Defense Mechanism" in 1949. As New Yorkers, we recommend her novel, *Missing Man* (1975).

Barry N. Malzberg - Barry was the very first winner of the John W. Campbell Prize for best new novel in 1972 for his *Beyond Apollo*. He is the author of over 300 short stories and 80 novels, a prominent editor, and possibly SF's most controversial critic. His (magnificent) new collection is *In the Stone House* (2000).

Michael Moorcock - Mr. Moorcock was the editor of Britain's New Worlds magazine, when through it, he ushered in a new sense of the literary in SF (and SF in the literary). He is the author of the Nebula Award winning story "Behold the Man", the very mod *Cornelius Chronicles*, and among innumerable fantasies, the *Elric Saga*.

William Patterson - Mr. Patterson is a leading Heinlein scholar. Working hand in hand with the Robert Heinlein estate, he has recently released a major study of the great writer, *The Martian Named Smith* (2001), with Andrew Thornton.

Frederik Pohl - Fred Pohl has been almost everything in science fiction. He was a devoted fan, magazine editor, agent, book editor, and of course, an award winning writer. Notable examples of his output include (with Cyril Kornbluth) *The Space Merchants* (1953), *Man Plus* (1976), and *Gateway* (1977).

Robert Sawyer - This Canadian is one of today's foremost hard SF writers. His debt to the Campbellian tradition is well demonstrated by the far ranging speculation of his novels, such as the Nebula Award winning *The Terminal Experiment* (1995).

Stan Schmidt - Dr. Schmidt followed Dr. Bova as Analog's editor in 1978. As a writer, he was a Campbell discovery in 1968 for "A Flash of Darkness." New work includes a novel, *Argonaut* (2002), and a collection, *Generation Gap and Other Stories* (2002).

Robert Silverberg - Certainly one of SF's most erudite and accomplished writers, Mr. Silverberg is also a proficient cactus gardener. We recommend *Downward to the Earth* (1970), *Dying Inside* (1972), and *Lord Valentine's Castle* (1980), among his many great novels.

Bruce Sterling - Bruce Sterling is the journalist, futurist, novelist, and activist who defined Cyberpunk with his Cheap Truth fanzine and *Mirrorshades* (1986) anthology. His own writings range widely, from the Victorian setting of his novel with William Gibson, *The Difference Engine* (1990), to mankind's transformation in *Schismatrix*, (1985).

Jack Williamson - The genre's senior writer, Jack began his career in 1928 with the publication of "The Metal Man" in *Amazing Stories*. Among his other seminal works are the "Humanoid" stories (1947,8) *Darker Than You Think* (1940), and the recently published *Terraforming Earth* (2001).

Appendix I

Critical Responses from Contributors

We sent VHS copies of all the content (excepting special features) to each of the participants in this project to thank them, as well as for their consideration and review. Nearly all the responses were positive, or courteous, if without criticism. Some suggested that more background would be helpful, and we have tried to provide it within this text supplement.

We did receive two letters, one from Bill Patterson and the other from Perry A. Chapdelaine, both of which contained some specific and worthwhile criticism. We do not argue with the validity of their respective viewpoints, but have tried in turn (again, within the body of this text supplement) to be responsive. Additionally, we present both letters, edited slightly for content, and with the permission of their authors.

Bill Patterson
February 10, 2002

Dear Mr. Solstein:

...Your "John W. Campbell" tape just caught up with me yesterday, and since I had just sent the current issue of The Heinlein Journal off to the printer and was temporarily at loose ends, I sat down with it last night.

I was particularly taken with the occasions when you used abrupt contradiction - Campbell had trouble relating to people/Campbell and Heinlein "clicked"; Campbell never listened to one/Campbell was listening to my ideas and conducting a dialog. For my own pleasure, I would have liked to see a little more exploration of those variant views of the same topic. However, I suspect that you didn't have so much divergence to work with. For this reason, I was particularly impressed with your evident skill in editing the commentary you got out of what must have been some rather

unpromising raw material. After all, Aldiss, Disch, Malzberg, and Moorcock, your main commentators, were, during the period their careers overlapped with Campbell, something of a clique of outsiders who seemed at the time to think of themselves as Mandarins. Their main relation with Campbell at the time was adversarial and dismissive. This does come through in their interviews, but your directorial artistry is such that it's not readily apparent that they have simply dropped large chunks of SF's history out of view. The two generations of early-to-mid 50s writers Campbell brought into the field are represented only by the late Gordon Dickson, who did not have anything to say about Campbell personally. Between thee and me, I really missed not seeing the also-unfortunately-late Poul Anderson here - and I suspect that if you had commentary from Niven, you would have demonstrated that Campbell was working with writers in just the same way in 1965 that he did in 1939 - which would tend to reinforce the point of the Lunch with John Campbell presentation, but contradict the dismissal. Your editorial skill has concealed the fact that their apparent unanimity of opinion that Campbell's last 20 years were a waste of paper is decidedly a minority opinion and one that is not supported by the historical facts. It is quite true that people did get tired of Dianetics (even Campbell got tired of that), psionics and the Dean Drive, but Campbell's editorial role in the explosion of the field in the 1950s is an honorable and productive one, and it is simply missing from their viewpoint.

There are a couple of downright errors in your JWC - by the interviewees, not by you - which I am pretty sure will occasion some remark: it would have been quite impossible for John Campbell to have picked Dune out of the slush pile, as Frank Herbert had been selling professionally since 1952 - and saying so raises the question that if Campbell wasn't doing the same thing he had done in the early 40s - i.e., bringing in and shaping new writers, etc., after 1950, why and how did he pick Dune out of the slushpile in 1963, supposedly long after he had given up interest in what he was doing? I am also sure you will get some adverse comment about the "Golden Age" references - particularly Harrison's insistence that the Golden Age corresponded with the professional lifetime of John Campbell. Generally speaking, the phrase "Golden Age" is used in two ways: first, to refer to Astounding immediately before World War II (sometimes it is stretched to include the period immediately after WWII, though this usually occasions protest as there seems to be a consensus that the wartime ASFs were simply not the same thing); and, second, in the sense of the saying attributed to L. Sprague de Camp that the Golden Age of science fiction is when you are twelve years old. I wondered about the

artistic purpose of including the comments about the Golden Age, as they differed so much I thought you were going to do something with the subject, but if you did I missed it. That saying is so widely quoted within the field that I feel sure you must have one of your participants saying it in unused footage - I believe Silverberg used that expression when I interviewed him for a local cable access show in the early 1980s.

I also appreciated the artistry with which you transliterated the DVD format into a relatively linear videotape presentation, with a good conceptual progression throughout. On the whole, as far as I am concerned, the only criticism that can be made of the presentation is that it has the defects of its virtues - and that is praise, if turned somewhat on its ear.

Thank you for this,

Yours very truly,

Bill Patterson

PS. Also while I am thinking of it, it might be appropriate to refer to Henry Kuttner and L. Ron Hubbard as formative figures in the Golden Age, the way Sturgeon is referred to. These two I mention specifically just because they are the other writers who often appeared two or more times in the same issues of Astounding under different pseudonyms.

(Perry A. Chapdelaine, Sr. letter follows on next page)

Eric Solstein
Greg Moosnick

Dear Folks:

Many thanks for sharing your John W. Campbell's Golden Age of Science Fiction with me.

I don't remember if I was asked for comments, but will offer several in any case:

1. Overall, it is a well-done presentation of JWC, and seems to reflect rather accurately his true personality and orientation in developing writers. You've balanced off a number of negative comments with more accurate interpretations, in my opinion.

2. Michael Moorcock's views were totally irrelevant. While he may have known the nature of Campbell and Campbell's impact on society, he persistently buried these accurate views so that nothing came forth from Moorcock except a black, negative Campbellian image. Moorcock, as I said, was irrelevant to your tape.

3. The idea that Campbell was either anti-Semite or anti-black was discussed thoroughly during Campbell's latter reign via fandom. I believe - with Campbell's agreement - I wrote a definitive fan article demolishing this idea. It was published in a then-leading fan magazine. However, once prejudice about prejudice gets started, it's as hard to kill as prejudice itself.

4. Barry Malzberg would be surprised to know the truth about some aspects of psi phenomena and it is viewed in the medical/scientific community of today. I worked for the US Air Force when they funded a study on the Dean Drive, proving it was wholly in error, as Malzberg indicates. However, many aspects of psi phenomena have since been well proven in numerous worldwide studies, especially in the frontier advances of medicine. I'm talking about rigid, double-blind, statistically valid studies of a kind Campbell sought for many years. During the past 20 years spectacular advances of proofs have been made. Reputable medical doctors have written books attempting to explain the phenomenon in energy terms; and - I believe - it was Stanford University among others who have clearly demonstrated the remarkable healing ability of "prayer." It seemed not to matter which religious denomination was involved, or even if the nonbeliever did the "praying," sick folks got well faster than those who

were not prayed over, and the distance, too, did not seem to matter. I cite this as but one example of numerous scientific studies that have now been performed.

So, contrary to Barry Malzberg and many others, JWC seems to have been vindicated on some of his "wild" ideas.

Anyway, good tape. Hope it is used and goes over well with others.

Cordially,

Perry A. Chapdelaine, Sr.

Appendix J

Bibliography and Recommended Reading

- Aldiss, Brian W. *Trillion Year Spree: The History Of Science Fiction*. New York: Avon Books, 1988, pb.
- Ashley, Michael (editor). *The History Of the Science Fiction Magazine, Vol. 1: 1926-1935*. Chicago: Henry Regnery Company, 1976, pb.
- Ashley, Michael (editor). *The History Of the Science Fiction Magazine, Vol. 2: 1936-1945*. Chicago: Henry Regnery Company, 1976, pb.
- Ashley, Michael (editor). *The History Of the Science Fiction Magazine, Vol. 3: 1946-1955*. Chicago: Contemporary Books, Inc., 1977, pb.
- Asimov, Isaac (editor). *Before the Golden Age: A Science Fiction Anthology Of the 1930s*. New York: Doubleday & Company, Inc., 1974.
- Campbell, John W.; Harrison, Harry (editor). *Collected Editorials From Analog*, New York: Doubleday & Company, Inc., 1966.
- Campbell, John W.; Chapdelaine, Sr. (editor), Perry A., Chapdelaine, Tony (editor), Hay, George (editor). *The John W. Campbell Letters, Volume 1*. Franklin: AC Projects, Inc., 1985, pb.
- Campbell, John W.; Chapdelaine, Sr. (editor). *The John W. Campbell Letters, Volume 2*. Franklin: AC Projects, Inc., 1993.
- Clarke, Arthur C.. *Astounding Days: A Science Fictional Autobiography*. New York: Bantam Books, 1990, pb.
- Clute, John (editor), Nicholls, Peter (editor). *The Encyclopedia Of Science Fiction*. New York: St. Martin's Press, 1995.
- de Camp, L. Sprague. *Science-Fiction Handbook: The Writing Of Imaginative Fiction*. New York: Hermitage House, 1953.
- Disch, Thomas M.. *The Dreams Our Stuff Is Made Of: How Science Fiction Conquered the World*. New York: The Free Press, 1998.

- Eshbach, Lloyd Arthur (editor). *Of Worlds Beyond: The Science Of Science Fiction Writing*. Chicago: Advent: Publishers, Inc., 1964, pb.
- Gifford, James. *Robert A. Heinlein: A Reader's Companion*. Sacramento: Nitrosyncretic Press, 2000.
- Gunn, James. *Alternate Worlds: The Illustrated History Of Science Fiction*. New York: A & W Visual Library, 1975, pb.
- Hartwell, David G.. *Age Of Wonders: Exploring the World Of Science Fiction*. New York: Tor books, 1996, pb.
- Knight, Damon. *In Search Of Wonder: Essays On Modern Science Fiction*. Chicago: Advent: Publishers, Inc., 1996.
- Malzberg, Barry N.. *The Engines Of the Night: Science Fiction In the Eighties*. New York: Doubleday & Company, Inc., 1982.
- Pederson, Jay P. (editor), Reginald, Robert (bibliographic editor). *St. James Guide To Science Fiction Writers, Fourth Edition*. Detroit: St. James Press, 1996.
- Rogers, Alva. *A Requiem For Astounding*. Chicago: Advent: Publishers, Inc., 1964, pb.