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MEDIA REACTION TO A SETI SUCCESS

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ABSTRACT

Consideration of the reaction to a SETI detection by the media, and the effect this will have on the public, is more than mere sociological speculation. An accurate forecast of the media's interest can lead to actions that will help ensure that correct and comprehensible information reaches the public. This is most critical in the first few weeks following a discovery.

While a widely accepted protocol for dealing with a detection exists in the "Declaration of Principles Following the Detection of Extraterrestrial Intelligence," it gives scant consideration to the fact that the actual situation will be chaotic and not subject to easy control. The 1996 story about the possible discovery of martian microfossils has provided a useful precedent for what will happen if astronomers uncover the existence of alien intelligence.

INTRODUCTION

It's a bizarre but durable fact that, according to every poll taken on the subject of extraterrestrials since the 1960s,

the majority of Americans believe that the aliens are not only "out there," but "here" on Earth as well. A similar fraction believe that the government is hiding important information about this cosmic company -- possibly to the extent of keeping alien bodies secreted from view in some heavily guarded-warehouse.

It is the author's personal experience that a substantial fraction of the public is also skeptical about the protocols of the "Declaration," which proclaim that any SETI success would be made public in a swift and orderly way. I agree with this skepticism, although for different reasons. The public's suspicion is that shadowy organizations such as the FBI or CIA would swoop down on our radio observatories, and quickly smother the news that we had uncovered an alien civilization. I don't believe that. But I *do* believe that the scenario for the first few weeks following a detection will be very unlike the rational unfolding of events pictured by the "Declaration."

Does that matter? Indeed it does. If we can predict what will happen in those first exciting days after hearing a signal, we can better prepare ourselves and the media for as accurate a transfer of information as possible. This could have very significant repercussions for our next steps: the construction of far larger instruments to pursue any modulation, or

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“message,” that the extraterrestrials might be beaming our way. Consequently, it’s of more than mere academic interest to concern ourselves with the immediate reaction to a SETI success. To do so has important, practical consequences.

PROTOCOL

The “Declaration of Principles Concerning Activities Following the Detection of Extraterrestrial Intelligence,” a protocol that has been voluntarily adopted by the major SETI projects, envisions the following actions in the event of a detection:

- Confirmation, including (if possible) observations at a distant observatory
- Notification of the astronomical community
- Notification of government bodies
- Notification of the general public

This is all reasonable and laudable. But of course it won’t happen that way. Information will get to the public before the confirmation process is complete. The story will not break cleanly. This is an unavoidable consequence of our policy of “no secrecy,” and it is not speculation. We have already had incidents that show us what will happen if we tune in E.T.

In late June of this year, the SETI scientists of Project Phoenix felt their blood pressure rise as they tracked narrow-band signals that, for nearly a day, convincingly mocked the behavior of an extraterrestrial transmission. In the end, the signals proved to be telemetry from the European SOHO satellite, a million

miles from Earth and sporting a 10 watt transmitter. The confusion was engendered by a temporary failure of Phoenix’s secondary antenna in Woodbury, Georgia coupled with a fortuitous positioning of SOHO relative to the sidelobes of the Green Bank 140 foot Telescope. But an interesting point is that a half-day into this incident, Bill Broad, a staff science writer for *The New York Times*, called the author to inquire about “that interesting signal you’re following.” It is our speculation that Mr. Broad learned of the signal through a chain of events beginning with an innocuous phone conversation to a third party involving SETI Institute personnel.

In any case, I assured Mr. Broad that I would be back in touch soon, and within six hours called to tell him that we suspected the signal was due to a satellite, a fact that was confirmed shortly thereafter. *The New York Times* ran no story on the false alarm (although it piqued their interest for a later piece).

THE STORY BREAK

This anecdote shows two things: (1) without a policy of secrecy, there will be no secrecy, and (2) the story will surely leak before the elaborate confirmation procedures of the “Declaration” are completed.

Imagine that the path of events in June had led to a legitimate signal, rather than to SOHO’s distant door. I could not dissemble with the *New York Times* for the days required to thoroughly confirm our discovery. I would either have to lie or refuse to talk (both of which are un-ward, and would certainly lead to un-

pleasant consequences). Instead, I would simply state truthfully that the signal showed signs of being extraterrestrial, and we're encouraging another observatory to interrupt their research to check it. At that point, even a responsible newspaper such as the *Times* will run with the story. It won't be a major headline because, after all, the discovery is still tentative. But it will be on the wires, and the Institute would be immediately flooded by calls from the media and the public. So would every other SETI organization.

Again, this is not idle speculation. Pundits have regularly compared the reaction to a SETI discovery with the Copernican revolution or the appearance of Darwin's "Origin of Species." These important shifts in our perceived place in the universe occurred in a different era, when the literate public was relatively small and before mass communications existed. They may be relevant models for long-term effects, but not for the immediate reaction. The same applies to the 1938 Halloween radio broadcast of H.G. Wells' "War of the Worlds." While this was a modern event, there is a substantial qualitative difference between picking up a faint carrier signal from a distant star and tuning in the radio to hear that aliens are in the neighborhood, trashing New Jersey. The best example of how the story of a SETI success will break was the 1996 announcement of possible microfossils in a martian meteorite.

NASA planned an orderly release of information about this discovery, including an official press conference. But the story was leaked, and NASA lost control. The day before the press confer-

ence, Richard Berendzen was talking to Ted Koppel on national television about possible life on Mars, and I was speaking to CNN. Neither of us had anything to do with the research. The NASA and university scientists who had made the discovery became the embargoed and muted victims of a well-intentioned media announcement plan.

The New York Times printed the leaked story, of course. They had to. Admittedly, it was only one of three lead stories under the masthead that day: the news was still unofficial. But this is surely an accurate precursor to the way a SETI detection would be reported.

It is also instructive to examine what happened to the meteorite story subsequently (see Figure 1).

- By day two, NASA had weighed in with its official presentation. There was abundant information, and the story "peaked."
- The daily coverage continued from 7 August through 13 August, one week. Thereafter, it dropped almost totally from view in the *Times*. This gives some idea of the timescale for stories about scientific discovery.
- The character of the story changed. It began as straight news. By the third day, the emphasis shifted to personality stories on the scientists involved. By day five, the *Times*' reporters were writing background articles on the long history of speculation about Mars, the belief in Martians, Percival Lowell's mapping of the canals, the Viking Landers, etc. At the end of the week, related stories were being printed dealing with possible life

on Europa and the so-called Roswell incident.

- There were two sides to this story, as there will be for any story. Almost immediately, researchers who disagreed with the NASA-led team chimed in with critical comments. The putative fossils were challenged. The story went from “Life on Mars” to “Maybe Life on Mars.” While some think that this uncertainty explains the surprisingly short lifetime of interest in this event, it may be that by going from “report” to “debate,” coverage of the story actually increased.
- The discovery provoked one editorial, two op-ed pieces (one by Richard Zaire, who was connected with the research, and another by Stephen Jay Gould, who was not), and one Letter to the Editor. This coverage was no greater than that of astronaut Shannon Lucid’s space adventures, a few weeks later. The reaction of the public, as judged by the Letters to the Editor, was far less than to a recent story on the safety of sports utility vehicles. The public is interested in personalities and circumstances that pose an immediate threat. Science stories generally offer neither.

WHAT WE CAN LEARN

These two recent events, the SOHO false alarm and the martian meteorite story, suggest the following lessons in regard to the first few weeks after a SETI discovery:

- The story will leak out before the signal is fully confirmed. At this point, the discovery team will be flooded with me-

dia (and public) inquiries. As a matter of efficiency and consistency, it probably pays to designate one person to whom all inquiries will be funneled.

- Triage will be required. Public inquiries must be deferred in order to deal with the media. To ensure a reasonable degree of accuracy in reporting, preference should be given to the flagship media, such as *The New York Times*, CNN, etc. The “bottom feeders” will resort to talking to fringe groups and UFO aficionados, but that will happen in any case.
- We should not lose control of the story by delaying tactics. Don’t expect to put the information “on line” and thereby avoid having to talk with the media: they don’t work that way. Also, note that personality and recognition count. Would the man in the street prefer to hear about the martian meteorite from the soft-spoken David McKay (who did the work), or from Carl Sagan? Put good people in touch with the media.
- Anyone connected with SETI will be asked for information, so it’s important to distribute the latest information to all research groups.

• Expect controversy and nonsense. Some people, legitimate people, will contest the discovery. They will get coverage, because conflict is newsworthy. The UFO crowd will be in a defensive situation, and will either dispute the discovery, or try to co-opt it by claiming that they “knew this all along.”

- There won’t be panic. Just as most folks (including most scientists) anticipated eventually finding evidence of past life on Mars, the polls have told us that

the majority of Americans are convinced of the aliens' existence. A SETI detection of sentient life elsewhere has already been heavily discounted.

- The long-term consequences will surely be profound. But they will be long-term. The amount of information attendant upon a simple detection is small. Only when efforts are proposed to find modulation will the true impact of SETI begin to be felt.

I am gratified that the SETI community has produced and agreed to the protocol espoused in the "Declaration of Principles." It is well and proper that we do so. But it is also important that we both acknowledge and act on the ample evidence that a real detection scenario will be complicated and messy. Most revolutions are.

Martian Meteorite Microfossils New York Times

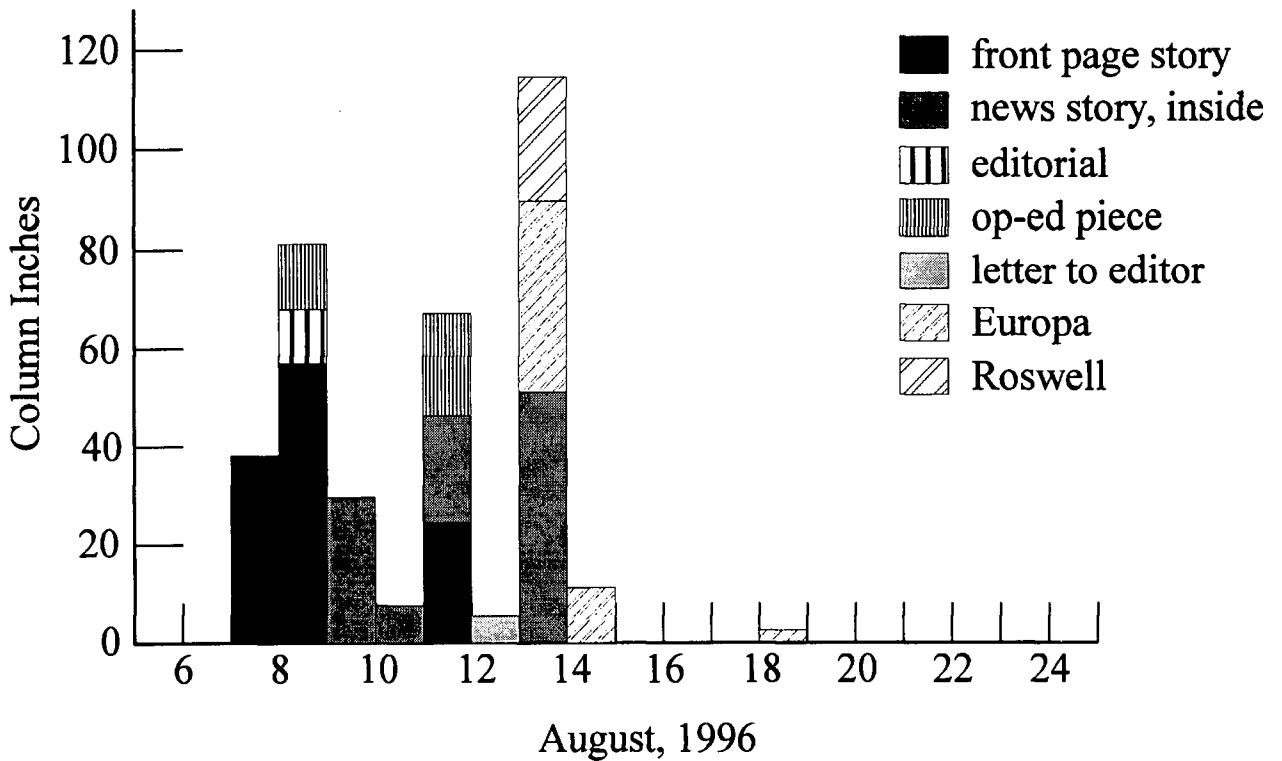


Figure 1. Coverage of the martian meteorite research in *The New York Times*. The stories span one week, beginning with the "leaked" announcement on 7 August. Note that 13 August was a Tuesday, the normal weekday for science stories in the *Times*. Related stories on Jupiter's moon Europa and the putative Roswell alien landing are also shown. The next Mars story appeared on 10 September.