

News and Comment

Let's Hold a Conference: Herewith an Imaginary Dialog between the Collector and His Quarry

"Hello, Joe. Listen, with all this concern about science and society, and science and government, and the information explosion, I think it's time we called together a conference that could set things in motion, sift the issues, bridge the gap, and really come up with something. I mean, call in the best people and get on top of this business. Are you with us?"

"Well, really, Larry, I'm terribly tied up in the lab these days, and with running the department, and I'm giving a course that meets three times a week. So, it's hard to get away."

"I know, Joe, I know. Aren't we all trying to do too much. But look, old man, it's first things first, you'll agree, and if we could just get the right people around a table, we could dig to bed rock, separate the warp from the woof, get down to where the rubber meets the road, confront the issues, and perform a vital service. We could meet a need and face the future, concurrently and simultaneously. Don't take a narrow view of your responsibilities."

"Oh, no, I wouldn't want to do that, Larry, but frankly, that conference you sponsored, the one on Counseling the Postdoctoral Dropout, I didn't think that came off too well."

"But Joe, you'll have to admit that the trip to Uganda made it worth while."

"I suppose so, but I had to miss a week's lectures to make the trip. And then that last conference, the one on Science, Society, Man, Religion, the Humanities, and Choices for Peace; now don't get me wrong, I certainly don't want to knock it, but I had the feeling that, at least in some respects, it didn't pan out the way I hoped it might. And that took all of two weeks."

"Now, Joe, coming from you that's a little surprising. Of course it didn't

rise to the occasion, meet our expectations, and fulfill our hopes, but that's just the point. We've got to take a long-range view, use a broad brush, deal with the realities, and crawl before we walk. We're ploughing new ground, erecting new edifices, and confronting the unknown. What can you expect besides a good start?"

"I suppose so, Larry, but still . . ."

"And you can't deny, Joe, that we did make a good start. I've got the page proofs here, and we're getting a splendid symposium volume out of that meeting. All of 1457 pages, leatherette bound, \$27.50. A regular tome. You'll have to admit that's something."

"Well, that's something, but still . . ."

"Now, Joe, just between the two of us, what can be going on in your department that can't but put on ice for a 5-day weekend? You know, you can't fool your old friend. Now let me tell you, we've been doing some pretty deep thinking about this conference, and we've come up with a list of acceptances that's golden. I mean, we didn't settle for the best, we took the cream of the best, and it's not only interdisciplinary, and multi-disciplinary, its cross-interdisciplinary."

"Well . . ."

"I mean, we've got the best research people, just like you might expect, but we've also got government, industry, labor, education, finance, and to top it off, we've got a bishop and a rabbi, and there's someone who says he can get us some really top space research people from the underdeveloped countries. They'll be here at about the same time for a conference on the Role of the Emerging Nations in Nuclear Applications for Outer Space."

"Well, I suppose . . ."

"You know, Joe, these are all really the most topflight people, and you never can tell what's going to come out of the cooker when you put such a high-powered crowd in one room and you have an intellectual free-for-all, open

debate, give-and-take, and free exchange of ideas. I mean, it really revs up the cerebral process. In fact, the whole thing looks so promising that it's being completely underwritten by the International Institute for the Elimination of Disorder Through Violence."

"That's very encouraging, Larry, but I don't know what use I'd be to the conference. For one thing, I don't have any information problem in my work. I know all the people who are active in my field. I see them several times a year, and any time I need information about what's going on, I can call them up or look in the library. I know that other fields have serious information problems, and it's good to hear that you're trying to do something about it, but in my own work. . . ."

"Again, Joe, you're taking a narrow view. Let me ask you something. Do you know any labor lawyers?"

"No, I don't think so."

"Well, we're going to have the top man in the country there, and how do you know he might not have some pretty good ideas for you? And you might have some pretty good ideas for him."

"That's possible, Larry, but it seems to me to be sort of improbable. After all, I'm a molecular biologist, and I don't see how a labor lawyer and I could really talk shop."

"Joe, I'm a scientist myself, too, though other responsibilities have kept me out of the lab for several years, and I can fully appreciate, completely sympathize with, and totally relate to your reservations. But that's just the point. Two cultures, and all that stuff. We've got to start the process of weaving our society into one totality, pulling together the loose ends, and interrelating divergent elements. You know, no man is an island and you can't exist in a vacuum in an interdependent world that is daily shrinking by the minute. Joe, you can't afford to be behind the times. It can stultify your thinking, believe me. From personal experience I can testify that it can have adverse and undesirable effects on your professional creative capabilities if you think the universe begins and ends at the lab bench."

"Well, Larry, I suppose you have a point, and I'd like to cooperate, but I feel that if you were going to be discussing something that I know something about, I'd be happy to arrange to attend. I know my responsibilities

extend outside the lab. I serve on several government panels, and I'm active in the professional society. I vote in every election. I . . ."

"Joe, do you know Grant Swinger?"

"From California?"

"Well, yes and no. He's on the faculty at California, but this year he's on leave to the Pentagon."

"Oh, then he's at the Pentagon now?"

"No, he actually took a leave from the Pentagon to return to his old place in California as a visiting professor, but for the time being he's back at the Pentagon as a consultant. Anyway, he's as busy as the rest of us—far busier, in fact—but he's managing to find time to attend the conference, and he's going to deliver an opening paper that's going to make a sensation. He's going to call for the establishment of a fully automated international data retrieval center tying together the Library of Congress, the National Archives, the British Museum, and nine other major libraries around the world. And all of this is going to be electronically tied to an automated compilation service of major daily newspapers and scientific journals. Joe, with this setup, you'll be able to push a button and find anything, from how many times second base was stolen on Tuesdays in 1937 to what's going on in protein synthesis. Joe, this will be the answer, and once we lay out the stuff for the world's decision makers to get the broad picture, we'll find a lot of things falling into place. Let's face it, right now we're working in the dark. We're sailing without a chart or a rudder, and sometimes I think we're sailing without a boat. We don't even know if we're asking the right question when we ask if we're asking the right question. When you sit down and think about how little we know, it's a miracle that the whole thing hasn't blown up. Man has been lucky, Joe, but let's not ride our luck."

"I suppose we've had a good deal of luck, Larry, but still . . ."

"And look, Joe, don't forget that we're not just tying this conference to the information explosion. That's an important part of it, and we'll have several panels going at it tooth and nail, hammer and tongs. But we want to look at this thing in a broad context, with the proper perspectives, and with all the necessary inputs. What we want to do is nothing less than to begin getting some definitions and extrapolations toward the development of data for a definitive analytical approach toward

the junctions, as well as the conjunctions, of science and society. Oh, I know it's years away, and maybe we'll never achieve it. I frankly tend toward the pessimistic. I might as well admit it. But we've got to make a start, and before it's too late."

"Larry, it's discouraging to hear that you're so gloomy about the prospects and I'd like to help, but I do have the feeling that I'd better stick close to the home base. We've got some pretty exciting stuff running in the lab, and I'd like to stay . . ."

"Joe, let your graduate students watch the pot boil. Last time I saw you you told me you have a pretty good bunch."

"Well, Larry, that's a little bit difficult at this time. You see, they all got grants and they're off at a conference in Mongolia for the month. I couldn't very well turn them down."

"Then turn it over to your lab technician."

"He's very good and I guess he could handle things by himself for a while, but he's at a symposium on the Laboratory Technician and International Relations."

"Then let your secretary run the place. Give her the number for the fire department and tell her to keep her eyes open."

"She's a bright girl, and I suppose that might work out, but she's at a workshop on the Secretarial Sciences in East-West Relations. Listen, Larry, I'm the only one here and there's a call on another line. Good luck with the conference, and let me know how things work out."

"Joe, I still think you're taking a narrow view of your responsibilities."

—D. S. GREENBERG

RAND: After Nearly Two Decades of Success, R&D Nonprofit Faces New Tasks, New Rivals

The RAND Corporation sees its major task as "recommending preferred instrumentalities and techniques" to its clients, including its chief patron, the Air Force, and this task has grown more difficult over the nearly two decades of RAND's existence.

In the era of American nuclear monopoly that immediately followed World War II, RAND was likely to be working on some demanding but reasonably straightforward problem, such as what kind of bomber to build next. The typical RAND study today, however, often requires estimates of the intentions or

probable reactions of both the unfriendly and the friendly. And the degree of political and economic analysis is much greater than in the early days, when choices of hardware were mainly involved.

The broadened scope of research has required a building of the RAND staff, on the original base of engineers and physical scientists, to include psychologists, economists, and social scientists (*Science*, 29 May). And RAND's response to the challenge of diversified research has led it into zones of controversy.

Perhaps the strongest single influence on RAND's image, still an indistinct one as far as the general public is concerned, was the attention given in the early 1960's to a book—*On Thermo-nuclear War*—by a former RAND staff member, Herman Kahn. The book is an exhaustive examination of deterrent strategy in the framework of a discussion of nuclear war between the United States and the Soviet Union. Kahn, while he concentrated on analysis, did make some recommendations, notably that a medium-sized civil defense program be initiated.

Kahn's book might not have achieved the notice it did had the threat of a "missile gap" not become a matter of dispute during the 1960 campaign. In addition, John Fitzgerald Kennedy was a great reader, and Kahn had a place along with such authors as Neustadt, Galbraith, and Rostow on the New Frontier list of required reading.

What perhaps was newest for the general reader about the book was Kahn's claim that it represented the "adoption of the Systems Analysis point of view—the use of quantitative analysis where possible, and the setting up of a clear line of demarcation showing where quantitative analysis was not found relevant in whole or in part."

In the climate of the times, however, public discussion centered not on Kahn's methodology but on the subject matter and on the scholarly apparatus and dispassionate tone of the book, which some found blood-chilling. The controversy over *On Thermo-nuclear War*, therefore, had as a focus not the point where fact ended and value judgment began—a subject which interested professional critics, including many in RAND—but the question of whether the very discussion of the subject brought nuclear Armageddon nearer.

In some quarters, because Kahn had worked for RAND and RAND worked