How Conferences?

To confer is to converse with; perhaps we should do that at conferences.

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The title is not a misprint for "Why Conferences?" I am quite prepared to suppose that most people who choose to sponsor or organize a scientific conference have some idea of why they are doing this; it may be because it is nice to meet old friends, perhaps it will add lustre to one's university department or division of physics, or to one's own reputation, or there might even be a real desire to discuss some scientific problems or progress. I wish to consider here, rather, the size of the conference and how the program might be arranged. Mind you, I realize fully that any serious, and maybe even useful, suggestions on how to organize and hold a conference with a minimum of fuss and bother might well put considerable numbers of people out of a job. I have been quite depressed on occasions in the past, when calling on some fellow scientist for a chat about a problem, to be met with a bland refusal to think about science because, "You see, I'm Organizing Secretary for the 105th Annual International Congress on Micro-pipettes to be held in 1964" (my visit occurring perhaps in early 1961!).

Now I think I know whereof I speak, to some degree at least, because in our group here at the National Research Council of Canada we have organized an appreciable number of small symposia of one kind and another over the past seven years, including one moderate-sized international conference, officially sponsored by the International Union of Pure and Applied Physics. I appreciate fully that our task here has been greatly simplified by the fact that the National Research Council of Canada has, in my opinion, been quite generous with funds for this purpose, so that we ourselves have not had to spend additional effort in soliciting money from

industry or the like, although I believe this has been necessary for others when organizing larger conferences here. If, therefore, the time spent in organizing a conference is largely taken up with obtaining necessary funds, I would be the last to criticize on that basis. But this is by no means always the case, and I still remain rather dubious about the actual dividend obtained for what seems to me the enormous amount of paper work and formal organization which goes into many conferences. I wish to make remarks about two "limiting" types of conferences: (i) the large conference, and (ii) the small conference.

The Large Conference

How many times have we heard the chairman at a large conference (say, 500 participants or more) suggest that the real work of the conference will be carried out, not at the formal conference sessions, but rather over informal cups of tea or even cups of something slightly more stimulating? All right. Could we not then be really honest about this and have all papers, or at least all contributed papers, read by title during the first five minutes of the conference and then make sure that the conference really does adjourn for these invaluable informal discussions at cafés, on the beaches, and so on? This would at least avoid the constant naggings of conscience that some of us feel in the cafés when we say to one another with an unhappy smile: "I suppose we really ought to go and hear old Jones give that tedious paper on microcellular ankylosis." I would suggest that, at the most, only about one lecture a day be given orally, and that it be of the "general" type and given by someone who really knows his job-by someone who has a real flare for speaking for an hour or so to a large audience about the main developments in a field, without half of his listeners going to sleep. And while we are on this topic, can't we in North America rid ourselves quickly of the neurotic tendency to feel that we must educate ourselves at the rather pallid conference banquets which are offered at such remarkably high prices? It seems to me nothing short of scandalous to be expected, after a banquet, to listen to a 90-minute talk on "My visit to some fascinating Brazilian water holes" (illustrated by 1342 rather dull lantern slides)-or for that matter, on the alternative, "Why I chose a scientific career and am now a Nobel Laureate." The art of after-dinner speaking is a very subtle one, and extraordinarily few people possess it; much better to finish our nonalcoholic fruit cup and sip the tepid coffee while chatting gently with our neighbors than to have to endure one or other of these forms of torture. I still believe that to listen to a really accomplished after-dinner speaker who knows how to entertain, and even quietly instruct, with humor, for about 20 minutes while we sip a liqueur and smoke a good cigar is a delightful experience; but the amateur half-way house isn't just tiresome, it's excruciating! Perhaps one must point out that if you want to find a good after-dinner speaker you will almost certainly have to go outside the circle of professors of chemistry, biology, or what-haveyou who are gracing your conference; one sometimes gets the impression that the post of after-dinner speaker is offered as some sort of consolation prize to professors approaching retirement. Actually, among the best speakers that I have heard in Canada, one was an author, critic, and free-lance broadcast actor (although to be honest he graduated in mathematics) and the other was a Queen's Counsel, dean of the Faculty of Law at one of our oldest universities, and a poet of some reputation. At a dinner following a symposium on "Memory and Language" he gave us a delightful commentary, with appropriate verses, on literary censorship, suggesting neatly that legal suppression was essentially an

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attempt to induce a deliberate social amnesia.

At large conferences, particularly, I also have the impression that enormous amounts of trouble often go into publishing special "Proceedings." Almost invariably it is promised that the "Proceedings" will come out "shortly after the close of the conference," and almost invariably this means at best a calendar year later, and often two. Is there really any necessity, or justification, for these special forms of publication? Oh yes, I have published that way myself; after all, if other chaps are going to get their papers published without the refereeing which is usual for the standard journals, why shouldn't I? The common practice of the Dutch of publishing "Proceedings" as integral parts of their standard physics journal Physica seems to me admirable, and there are other journals which have done the same sort of thing. Quite apart from anything else, it is so much easier both to refer to and to find "Proc. Roy. Soc. B1001, 312 (1965)" than "Report of Proc'gs. of 105th Ann. Int. Cong. on Micro-pipp. (held in Christianshaab, 1964, pub. Dansk.-Norsk.-Sved. Pub. House, 1967), paper 0-6-12A, p. 5."

The Small Conference

And what of little conferences? Well, we recently held one here in Ottawa from 18 to 22 June, and I'm really amazed to see how little work need be involved, at any rate so long as your finances can be handled without the difficulties I mentioned earlier. If you really want to try to learn something, then I think you have got to limit your conference fairly severely both in numbers and subject matter. Our own research group here provided from 12 to 15 interested and vocal participants and auditors for the half-dozen specialists who were good enough to come to Ottawa. Practically everybody knew everybody else, or did so within the first morning, and so there were no badges and no conference forms, and as a matter of fact there was no conference banquet! A so-called "working party" at the National Research Council can readily be provided with lunch; for 3 days of our conference this charming euphemism was applied to us. In all seriousness I'm inclined to believe that a really small working party conference is one of the most useful and rewarding of all.

By official North American standards I suppose we were very lazy. The actual conference hours were only from 11 A.M. to about 1 P.M. and from 2:30 to 4 P.M., but within these hours practically everyone turned up at all the "sessions," and there was ample time left for people to wander out into the fresh air and talk as they pleased of physics or other matters. There will be no published "Proceedings" of this conference; at most, one of the visitors will write a short review of the highlights for publication in *Nature*.

Of course, the idea of a small working party conference is far from new— I suppose it is really the oldest kind of physics conference, since in essence this is what Solvay Congresses were originally designed to be. The important thing is that most of those taking part should be prepared to come and argue, discuss the topic at hand, and use the blackboard at short notice, rather than necessarily wishing to "present" their papers. Some reasonable outline of a program should certainly be framed; people must be found who are both willing and competent to open each main topic with either a broad review or a discussion of controversial questions. But apart from this framework, the timetable should be kept as elastic as possible, and, I believe, one should be ready to switch to fresh topics at any time if these seem more promising. And it really is important to leave ample time for unrehearsed discussion "from the floor"-10 minutes grudgingly given by the chairman after a formal paper has exceeded its allotted hour is just not enough! In my opinion, if the chairman has to remark rather often, "I suggest that this discussion will now best be carried on privately," then we have a conference which has precisely missed the point of the whole thing. I suspect that conference organizers have a haunting fear that, if they allow plenty of time for free discussion from the floor, the discussion may peter out before the allotted time for lunch, tea, or the like. But is there really any law against stopping 20 minutes early and going out into the fresh air?

I suppose by writing this I have fallen into the trap myself of thinking about conferences rather than physics—oh, well, back to the drawing board!