anybody tried to establish how many people we can employ each year in this country, say, as radio scriptwriters, short-story writers or people who would like to act for television, in ballet or in drama or whatever it might be?

Dr. Dymond: I think that as part of our forward projection and forecasting work on manpower requirements we would pick up a part of that although this kind of forward forecasting, because of the factors of technological change and unpredictability of some elements of social demand, which is the area you are discussing primarily, is a very difficult kind of thing to come to grips with in any sort of detail such as the demand for entertainers and musicians as compared to people working in, say, the television field generally. Mr. Pankhurst, have you any observations to make on that?

Senator Grosart: It is very hard to say how long rock and roll is going to last.

The Chairman: There is a cycle.

Mr. Pankhurst: I don't think we conceive it as any part of our program at the moment to try to produce projections in the kind of detail that the senator is asking about. There is a very large demand for projections of the future manpower of the Canadian economy and of the way that it might be distributed between different kinds of industries and occupations, and, at the moment, at the beginning of our program, we regard it as primarily our responsibility to try to do this sort of thing in a sufficiently general way to be able to set the context for examining the broad policy implications of it or providing a context in which other people can make their own projections and to advise them of methods of doing that sort of work.

Senator Cameron: Mr. Chairman, I saw much the same sort of results of this kind of experiment last year. It was a pilot project. I thought it was very successful. A lot of people are beginning to inquire if this is going to be incorporated as a part of the manpower training policy. I see no reason why it should not, but before we can say, "Oh, yes, we will pay your fees to go to summer school or to the drama department of the university", we should know how many people this country can absorb in that field. There is no use training people and then having them stand around not being able to get a job.

Senator Thompson: Does that not apply to the whole of the manpower training program? I have heard of people being trained to become welders when welders were not needed.

Dr. Dymond: The senator has hit an area where it whole-which was 7 per cent of the labour force in is much more difficult to forecast because you are 1951 and 10 per cent in 1961-will grow to 16 per

talking about taste, essentially, and taste is an interacting process, as I would see it. You put before people certain things. For example, if they want to have more ballet, they must have some experience in order to really know if they want it, in the first place. You get a kind of circular or interacting process of demand built up, of which the supply in part creates its own demand, to get the kind of supply that seems to catch the public fancy or taste. I think the senator has hit on a difficult area for forecasting.

The Chairman: But to come back to a subject which is perhaps more directly related to our inquiry here, you made a survey of the professional, scientific and technical manpower in 1967. In the main brief you describe that survey from page 53 on. You say that this survey was based on 31 per cent of the number of holders of university degrees reported in the 1961 census. You then proceed to give tables of the distribution of this manpower between professions and disciplines and so on. Do you not think that most of these results are quite meaningless because they are based only on 31 per cent?

Dr. Dymond: That was merely intended to suggest that we are only covering a part of the highly qualified manpower field or the professional field. We are not pretending to cover the arts or lawyers or doctors or very many other professions. This is only covering scientists and a few fields of social science, economics, sociology and engineering. It is only a partial coverage that we are conveying by the 31 per cent of the total professional manpower spectrum.

The Chairman: All the professions listed in your tables are completely covered, however.

Dr. Dymond: In principle, yes. That is right.

Senator Cameron: I might interject that, having looked at two or three of them, I thought it was a pretty awful questionnaire.

Senator Thompson: Do you agree that there would be a glut of scientists, as we heard, or do you think there is a shortage of scientists?

Dr. Dymond: I might ask Mr. Pankhurst to answer yes or no to that question.

Mr. Pankhurst: In general, if we are talking about all the scientists and engineers, we have made some very preliminary projections of future needs, as part of a study we have in progress at the moment to make some projections for 1975. This is something we are doing with some urgency, so the techniques are rather rudimentary. However, we have provisionally estimated that the professional group as a whole-which was 7 per cent of the labour force in 1951 and 10 per cent in 1961-will grow to 16 per