Saturday, Nov. 12, 1960

Dear Walt and Betty:

I am enclosing, Walt, not only the copy of the letter to Louis which is the special one Rae would like you to grapple with first — but also the copy of the letter to Baul, which you already read over, but at the party when there was not much time or quiet to study it, and "cold", that is, with no other letters to fill out the gaps so to speak. Both of these letters are REB copies, and must be returned when you are through with them — although you should not let that needlessly hurry you. Take your time to study them and reread as often as you think necessary.

In relation to the Dear Louis letter Rae asked me to tell you that there are two things she is most interested in and would like you to chew over because she knows so little about it herself. Both things concern Einstein, and both mean some heavy reading for you: (1) Rae would like you to get and read the edition of Einstein's work on this Theory of Relativity in which either the Preface is written by a woman hamed Bruria Kaufman, or else Einstein says in it that he credits her with having simplified his theory. Rae thinks this is the fifth edition, but isn't sure. You could check it by making sure it is the one which has the Bruria Kaufman reference I've just mentioned. (2) Rae would like you to read also Einstein's Unified Frield Theory itself, which may or may not be included in this same edition, she doesn't know

The reason is as follows: You may or may not have known that Rae was not only in touch with those working closest with Einstein, but "won" their respect and "support" as well, and Rae discussed with Bruris those aspects of the unified field theory which she felt were very important not only to science but to humanism as well. Bruria, however, kept insisting that the unified field theory simply meant that they had found the formula which showed matter and energy could be converted one to the other, and that it showed all fields were not only related but unified with no fast divisions between them. (Forgive me for what I am sure is a "vulgariation" of what Rae has passed on to me). Rae, on the other hand, has kept insisting that even though science refuses to apply dialectics to history, while it accepts it for science, it is im-

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possible to pass off as mere "accident" the fact that the theory of relativity was first pronounced in 1905 at the same time as social revolution was bursting forth all over the world : in Russic, in America with the IWW, in Africa with the ZULU rebellion against Britain. The upheavals were both social and scientific therefore, and Rae is certain that when people are invoved in trying to change their lives it impels revolutions in other fields as well.

Now let's skip all the way to 1943, which was the first year in which this theory of relativity could be PROVEN (a la the bomb). So far as Rae is concerned there is no reason on earth why this fantastic delay of 38 years had to take place, except that capitalism was not ready for it until the war needed it. However, by this time there was a new tage in social revolution — that is, by now, as different from 1905, the world had passed to the stage of WOHLD revolution as the only sort possible to allow humanity to develop. It was as necessary for humanity, as the unified field theory was necessary for science, if science were to develope. And sure enough, on the heels of Automation and Atomic energy came the unified field theory in 1950.

Rae wants to know what you think, or what you know about any of this, thinking always in terms of the two levels both historically and scientifically of 1905 and 1950. To develop this idea a bit further Rae has taken the develop of Russia in the past 15 years as follows:

Russia seems to have been able to jump ahead in the scientific field first because it was not hindered by the "pragmatism" which anerican scientists suffer from -- as well as the fact that it was not hindered by any imposed "religious" prejudices, so that if it came close to some new idea it did not withdraw because it would be setting too close to the secret of life or some such thing. By having this advantage to begin with, once it began to move, it moved with great leaps.

In the period 1945 to 1950 came the A bomb for Russia. Stalin, however, was a stone around the neck because he kept wanting to move to war, so that the period from 1950 to 1953 was one in which the Russian bureaucracy kept trying to get rid of Stalin. In 1953 he finally died and they stopped the Korean War (which was as unpopular in Russia as in America, incidentally) and really moved ahead scientifically. By 1958 they had their Sputnik. THIS IS WHAT RAE IS CALLING THE DISCONTINUOUS IEAP, that is not only had they caught up with America, but they had surpassed us. In other words they were superior not only relatively (that is their rate of development) but absolutely.

Now what Rae want to see, concretely to prove, is whether the scientific developments in chemistry from pure science to technical applications would have been done faster and more thoroughly, where this was not confined by the dvellpment of private capitalism. In other words, there used to be a period when a full decade or sometimes several decades were spent before a theory and its application merged. Since World War II, only 3 to 5 years divided the two and sometimes they are almost simultaneous.

Rae wants to know from you which parts of chemistry or pure science or technology that you are acquanted with, or can become actuainted with brough some heavy reading on it, could define the limitations of American bourgeois science -- and permitted Russia's advance. To this day, America has no thrust equal to Russia's.

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Manyou well know, has is not the slightest concerned with fuscia. She has analyzed that for humanity already. What she has interested in is how this "discontinuous" leap nould work for the undeveloped countries so that they need not go through hierors of capitalism to bring industrial development to

I began this letter yesterday, and today Sunday we just the first presentation to the Detroit committee. It was quite ane-some. I took notes, but my head is swimming with all the packed into that hour and a half. I will be looking forward you letters to her as such as she will.

I hope this "covering letter" has not confused you more than clarified what has is driving toward. If you have any the key to the answer.

Everyone's best to all of you. Hope you get to hear the

Warmly,

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