

Chapter 15

Letters to Hanna Loewy and Lilly Kahler, 1951-53

Letters to Hanna Loewy

Letter 13. Folder C38, not dated.

[October 1951, en route to Brazil].

An Airmail Letter from
Pan American Airways System

Dearest Hanna

We are now waiting in San Juan, Porto Rico, for my plane to leave. This trip has been a long series of delays. Just as the plane was ready to rise in the air in NY, it slowed down and came back to the airport building. It turned out that they wanted to remove a man from the plane whose passport was not in order. You can imagine that I was a little worried.

We should be leaving here now. What I have seen of the island is very nice, with medium size mountains coming down to the seashore. The weather is rather warm. Most of the people speak Spanish

I will write more later when I get to Brazil

Love
Dave

Letter 14. Folder C38, not dated.

[Shortly after October 10, 1951 when Bohm arrived in São Paulo].

Avenida Angelica 160
São Paulo, Brazil

Dearest Hanna

At last after many long delays, I am in São Paulo. The city (which has about 2 million people) resembles the U.S. of 30 years ago. There are many small stores, and few of the large department stores or chains characteristic of the U.S. The large modern apartment buildings are however very beautiful. I am told that architects refuse to design buildings unless they are permitted to make them beautiful. The general impression is that the country is considerably poorer than in the U.S. The middle class section is somewhat shabby and tends toward being dilapidated. However, the people are very energetic and much construction is going on. The weather is cool and resembles N.Y. in late April. I stopped briefly in Rio, which is really a very beautiful city. There the emphasis is said to be on good living, whereas here it is on working and "getting ahead". Even in my short visit at the Rio airport, I could see that people had an easy going attitude towards life. For example, I was met at the airport by a cute little girl (about 18) who was supposed to escort me to the waiting room. She knew only a little English, but asked me if I knew any Portuguese. I answered "Not a word". She said "But surely you must know the word for love – amar".

I am now living at a sort of pension where I have a room and meals. The cost is about \$125 a month. The food is very good, but the room is rather small. I may look for a better room, but a good room costs from \$75 to \$100 a month. It is convenient to stay here, however, because several other physicists are here, and many of the people speak English. You have no idea of how helpless one is in most places here where nobody speaks English (for example in the stores). Even in the hotel where I stayed the first night, only one man spoke English and that very poorly. You can't use the hotel phone until you can pronounce their numbers, and even then it doesn't help unless the party you want speaks English. However at the university, many people speak at least a little English. Meanwhile I am learning a little Portuguese, but it will be a long hard job. The country is very new to me and yet when you look at it, it is not very different from the USA. The people are somewhat darker (although there are many blonde Germans), and they look considerably less strained and worried than in N.Y. But in general everything is similar, but differs chiefly in being on a smaller scale and less lavish. As I said, the stores are all small. The food stores and restaurants are not as clean as in USA, and tend to have odors of decaying food about them. All through the streets are signs of people running for city council. 60 councilmen are to be elected and 1000 are running.

The University is rather smaller than I expected. It has about 5000 students, but the various "Faculdade" are distributed in different buildings throughout the city (a single university campus "Cidad Universidad" is now being built in another part of the city). Tuition here is practically free. There are a surprising number of women students, even in chemistry, math. and physics. Most of the students will teach in high schools, a few in the universities, and a few will do research in industry.

The Departamento de Fisica is in bad shape now and apparently they expect me to help them do something about it. The various departments (Physics, Math etc.) work almost independently of each other, as do the various professors. The net result is a sort of chaos of courses. After the war, the physics dep't was in a bad shape, having

few people in it to teach. As a result, even the physics students were taking mostly math. courses. By now, this is very hard to change, even though there are more physics teachers available. Many of the physics professors like this arrangement because it gives them more time to do their own research.

Another difficulty that has arisen is that gradually by custom the students have come to beginning classes about a month late. This is also very difficult to change, since by common agreement the students just do not show up. This illustrates the state of affairs here.

The library and other equipment here is not particularly good. All in all, this would not be a good place to stay indefinitely. But for a while it should be interesting. I'll do what I can to help them, but doubt that I can do so very much.

I'm not lonely for the USA but I am lonely for my friends there. It is a little frightening to realise that the language barrier will for a long time make really close contacts with most people rather difficult. For example, in explaining physics to people who do not understand English very well, the imagination is not stimulated nearly so much. I shall have to guard against a tendency toward stagnation here. However, I hope to be able to take a trip to Europe during the winter vacation (June and July).

I am very lonely for you. Please write me what you are doing, how you are feeling. How is it going with Dr Hale? What about the translation? Also what about the N.Y. Times? Is there any other interesting news from home?

Love
Dave

Letter 15. Folder C38, not dated.

[October/November, 1951].

Avenida Angelica 160
São Paulo, Brazil

Universidade de São Paulo
Faculdade de Filosofia, Ciências e Letras
Caixa Postal: 8105
São Paulo

Dearest Hanna

Since you still haven't answered my letters, I am beginning to get worried about you. Are you well, or perhaps you are simply angry at me? I think of you quite often – really you made a deeper impression on me than I thought at first. When I got here, I was so busy with new experiences that the past was more or less submerged for the time being, but now it comes up again. I get worried about you not writing and have trouble sleeping because I wonder what is happening to you. Please write me and please let us be good friends forever.

As might be expected, I am having some trouble getting used to things. The noise is the worst thing, as I can't get enough sleep. However, Philip Smith and I are

looking for an apartment in a quiet sector. Apartments are expensive – a minimum of \$150 a month (unfurnished) for two bedrooms,– kitchen, bath, and a small guest room. I found a nice one (with the aid of some friends in the Physics Dep't) but the owner refuses to rent to bachelors! In any case, Smith is now laid up because of an accident. In a city where it is dangerous even to cross the street, he bought a motorcycle. Within a week, he collided with a truck, breaking several ribs, and his shoulder bone. He is out of the hospital, but will not fully recover for another month or two.

Physics is coming along nicely. I have had several new ideas and Tiomno has made some very interesting suggestions. I think we are on the track of a great unification between quantum theory relativity and electromagnetic theory, which will do what Einstein has always been aiming to do, but in a different way.

I am so tired that I can hardly keep my eyes open. I hope that I get a letter from you. Please write, and use my home address as it is better for quick delivery.

Love
Dave

P.S. Regards to Lily and Eve and Ben.

P.P.S. I am slowly learning Portuguese. It will be at least a month before I can hope to ask directions in the street.

Letter 16. Folder C40, not dated.

[November, 1951].

Avenida Angelica 160
São Paulo, Brazil

Universidade de São Paulo
Faculdade de Filosofia, Ciências e Letras
Caixa Postal: 8105
São Paulo

Dearest Hanna

Thanks very much for your letter. I enjoyed it very much, and was glad to hear that you are feeling well, and working on your book. I have just been sick with a combination of diarrhoea and fever, and spent a few days in the hospital, where they filled me full of penicillin, sulfa, etc. It wasn't serious, but it is annoying. The doctor made tests, but was unable to find the cause. The only lesson is to be more careful with my food.

Tomorrow I leave for the city of Belo Horizonte (means beautiful horizon) located north of here and further inland, where there will be a meeting of the Brazilian Scientific Society. I shall give a talk on the Quantum Theory there. Incidentally, I have given some talks on my interpretation of the quantum theory here, and have aroused considerable enthusiasm among the theoretical physics people.

Avenida Angelica is far from angelic. It is right near Avenida São João, where there is one streetcar a minute, and where the autos go at furious speeds, clearing a path ahead of them by continually blowing their horns. I haven't been able to sleep very well. This section was once a wealthy section, called "Campos Eliseos", but now the old mansions have been converted to middle class pensions, such as the place where I live.

Smith and I are planning to move into an apartment soon. We had a good one in a quiet place, but the owner didn't want to rent to "bachelors". This shows the kind of town São Paulo is. São Paulo has been called "the Chicago of South America". It is extremely bourgeois, and extremely stuffy in its morals (very unlike Rio). However, if worst comes to worst, we are assured that we can get an apartment near what used to be the prostitution district. They used to have a legalised district of prostitution, but two years ago, it was made illegal, with the result that the girls took apartments in the neighbourhood. In such a neighbourhood, the landlords can hardly object to "bachelors".

I haven't met many people as yet, but expect to start to do more of this when I get back from Belo Horizonte next week. I have almost finished the book on Portuguese, (will finish in two weeks at most), and can now read the papers and books fairly well, and can carry out very elementary conversations. The trouble is that there is no pressure to learn the language on me, because I am surrounded by people who speak English.

Well, I'll let you hear more from me later. Please write and give my regards to Erich, Lily, etc. I am very glad that you were able to detect the note of phoniness that is developing in the Shahn's. I have felt uneasy about them for over a year, because I feel they are doing two things: (1) Switching over to a very wealthy and distinguished circle of friends (2) Rationalising their political beliefs so as to fit into this new circle, entrance into which has been made possible by Ben's fame as an artist. The fact that Ben did not object to a superficial book on a level of purely personal observations is related to the whole change in Ben's position.

Love
Dave

Letter 17. Folder C38, not dated.

[November/December 1951].

Universidade de São Paulo
Faculdade de Filosofia, Ciências e Letras
Caixa Postal: 8105
São Paulo

Dearest Hanna

I am getting worried about you, partly because you didn't write for so long, and partly because I got a letter from Miriam saying that you had visited George and that George thought you were having a hard time. I wish that you would write and let me

know how things are with you. Please try to keep on working, even if things are hard. I know that you can do well. I have always had a strong feeling that you have great potentialities, which could be realised if you learnt to discipline yourself. Please let me know how your work is going, how is the car, how you are doing with Dr Hale (or how you were doing). I am not going to buy a car here, so Mr Pim is all yours.

As for me, I have been sick with diarrhoea and fever quite a bit, but am gradually bringing it under control. By now I am normal except for a slight tendency toward diarrhoea. I am beginning to meet more people, but haven't done much work as yet. However, at the scientific conference at Belo Horizonte, I gave a talk on the quantum theory, which was well received. Feynman was convinced that it is a logical possibility, and that it may lead to something new. Also I got a letter from Pauli, in which he practically concedes that the idea is logical, and in which he raises mostly philosophical objections. I answered these in another letter, and am now awaiting a reply from Pauli.

I am moving into an apartment with Smith in two weeks, so for the time being, I suggest that you write to the address printed on this letterhead. Please let me know how things are. It was quite a shock to hear from Miriam that you are so unhappy, and I can't get over feeling badly about it. If necessary, I could let you have another \$100 to see Dr Hale.

Please give my regards to Erich & Lily, and to Ben (are you still in the same apartment).

Love
Dave

Letter 18. Folder C38, not dated.

[December, 1951].

Miramar Palace Hotel
Rio de Janeiro

Dearest Hanna

I got a letter from Lily and learnt that you are OK but do not write because you do not know what to write. I understand this, but I shall write to you anyway to let you know how things are. As you know, they took away my passport a few days ago. I can stay in Brazil but can get back my passport only for the purpose of returning to the U.S. This worries me, first, because they may be planning to ask me to come back, and second, because I cannot travel to England this summer. I really was counting on this trip to help stimulate me, and to help me get out of the rut that comes from lack of contact with people to whom I can talk in English and who can understand my problems. Right now, I feel sort of "choked" in my scientific and personal development, in being forced to stay in Brazil, and I don't know that it would be wise for me to stay too long. Even to return to the U.S. for a vacation might be an advisable risk.

Right now, I am in Rio giving a talk on the quantum theory. About the only person here who really understands is Feynman, and I am gradually winning him over. He already concedes that it is a logical possibility. Also, I am trying to get him out of his depressing trap of doing long and dreary calculations on a theory that is known to be of no use. Instead, maybe he can be gotten interested in speculating about new ideas, as he used to do, before Bethe and the rest of the calculators got hold of him.

Rio is in a magnificent natural setting, that far surpasses San Francisco in its beauty. Steep mountains and rocks fall right into the sea, covered with tropical foliage. However, the city itself is somewhat shabby and does not measure up to its natural setting. I am staying in a hotel on Copacabana beach. The beach is in the shape of a half-moon, ringed by mountains and rocks. But the hotel is full of Americans of the less attractive kind that one associates with wealthy American tourists. Also I don't feel well, as I caught another intestinal infection. So I am not enjoying this trip much, although the people are friendly enough. Rio is a gay city, but it's gaiety is a little empty. I prefer São Paulo's energetic character and cool climate, in spite of its bourgeois nature. I am looking forward to returning to São Paulo already, where I feel a little bit "at home".

As you told me, Brazil is too "American" for me. I feel the need of finding a country not spoiled by American money, and the "American way of life". The people of Brazil have no defence against the American invasion at all, not only because they are so poor, but also because they don't realize what is happening to them. I feel an increasing dissatisfaction with life here, which can be remedied only if I can find the right kind of friends. Thus far I have found nice people, but I do not feel the possibility of a really close understanding with them.

When you feel like writing, please let me hear from you.

Love
Dave

Letter 19. Folder C40, not dated.

[December, 1951]

Universidade de São Paulo
Faculdade de Filosofia, Ciências e Letras
Caixa Postal: 8105
São Paulo

Dearest Hanna

I received your letter of Nov.15. I hope that you received my more optimistic letter, designed to counteract the very pessimistic letter that I first sent.

Let me tell you now that the situation looks a little better here. There is some chance to improve the physics dep't. Also, I have gotten a permanent identity card, which means that I can stay here indefinitely, even without a passport. Also, if I want, I can apply for citizenship. This would have some advantages; as with it, I could travel. But the disadvantage is that I could not return to the US, at least for a

long time. For according to the McCarran act, they can exclude any non-citizen from the U.S. who in their opinion, was ever connected with Communism. So it's a tough decision, isn't it?

Another problem is that someone here has started a rumour that I am a communist. This rumour has reached the University authorities. It may make it difficult to renew my contract (in October).

I hesitate very much to return home. As long as McCarthy controls the State Dep't, I think there is absolutely no chance that I could get a passport. Not even what Lili suggested would be possible – namely – to return home and then to come back to Brazil. In the present semi-fascist atmosphere in the States, I would be lucky to get even an industrial job. For the Committees are now beginning to investigate people in industry. Also, if as seems likely, they should pass the immunity statute, then I should soon be in jail.

My health is a little better now. As for your idea of "getting a girl to cook for me" you should know that this is impossible in Brazil. Brazilian customs would make even my aunt in Wilkes-Barre look very broad-minded. Did you know that women are examined for virginity in the Brazilian middle class, before they are married? If she is not a virgin, the man doesn't have to take her. And if a woman is alone on the street after 8 PM everyone assumes that she is a prostitute. The men stare at her, whistle at her, and try to pick her up. The whole attitude toward women here is like the worst of mid-Victorian society. Women are regarded as cooks and bearers of children – and most of them have developed so poorly as people that there is little more that they can do.

Thanks a lot for writing me. Please don't discuss my plans with anyone but Lily and Erich, and ask them not to spread it any further. I haven't yet decided what I shall do. Perhaps I could make another effort to get my passport back, while remaining in Brazil.

Love
Dave

Letter 20. Folder C40, not dated.

[Early 1952].

Universidade de São Paulo
Faculdade de Filosofia, Ciências e Letras
Caixa Postal: 8105
São Paulo

Dearest Hanna

I was very happy to get your letter, and enjoyed reading it very much. I must apologise for not answering your beautiful and clever New Year's greetings. I always get a strong feeling of pleasure whenever I receive a letter from you, and we are certainly as you say, "still friends". You are probably right in supposing that Lili's letter tended to make me put off writing to you. I always felt "O, this is so complicated,

maybe I'd better do it later". I didn't, as you think, however, really get angry. As for your friendly assurance that you wouldn't marry me if I were the last man on earth, I receive this with mixed emotions. Let's just leave it at your previous statement that neither of us was really ready for this particular marriage at that time.

I am very pleased to hear that you are working as a draftsman, and hope that you can soon get a suitable job in the movies. It is also really very good to hear the tone of happiness in your letter – It gave me a big "lift", as I have been depressed lately by the eternal rain (which should end soon) and by the steady movement toward war. The disgraceful action of the French Socialists in deciding to ally with the Nazis and the US really is amazing. It shows that 9 times out of 10, middle-class "good wishes" come to nothing, when it is really time for them to come out for their principles. The fate of the world literally hung on their decision, and they decided to help re-arm the Nazis.

I was very interested to hear about all the young physicists at Columbia, so deeply immersed in my book. You can't seem to keep away from physicists; perhaps they have a fatal fascination for you. My article is scheduled to appear in the Jan 1 issue of the Physical Review, but this issue seems to be very far behind schedule. All I can say is that it should be out any day now.

I have been doing more work on my theory, and have shown that there seems to be a connection between quantum theory and plasma theory (on which I was working with Pines and Gross). I now think that relativity as well as quantum theory will have to be seriously altered, before further progress can be made. Briefly, I am led to the notion that all space is filled with a substratum (very very dense) made up of particles millions of times smaller than an electron or a proton, and that electrons & protons, etc. are structures in this substratum. These structures are modified by moving through space, in such a way that Einstein's laws of relativity provide a good approximate description of their motion. But in connection with processes taking place at very small distances (the size of an electron or less), or at certain energies higher than have yet been attained, the theory of relativity should fail; and "absolute space" in the form of this substratum should manifest itself. Of course, the substratum should be only "relatively absolute" since its particles are in turn made of something still smaller, etc. ad infinitum. Thus all matter contains an infinity of qualitatively different levels, all interconnected. Moreover, there is another interesting point. The so called "particles" of any given level are made up of structures in the "particles" of the lower level, etc. ad infinitum. I find that both the qualitative nature of these particles and the number in existence can be collectively conditioned. Thus, not only is the collective behaviour determined by the infinitely complex individuals into which it can be analyzed, but the individuals are themselves determined in part by the collective in which they are participating. Because of the infinity of levels, you cannot say that there are any ultimate "individuals", which are "fundamental" in the sense that their character is unalterable, and their existence eternal. At any level, any particular form of matter can always come into existence & go out of existence as a result of a transformation in the components existing at a lower level, but only matter as a whole, in its infinity of properties and possibilities, is eternal.

Unfortunately, I cannot yet put these ideas into a precise & quantitative form; as yet they remain vague and qualitative. I should also add that I believe that no law is absolute or final, but that each law provides a successively better approximation to an absolute truth, that we can never possess in a finite time, because it is infinite in all its aspects, both qualitative and quantitative. But as we work and study, we can steadily uncover level after level, and thus move in the direction of an absolute understanding of the laws and properties of matter. Humanity as a whole (combined with all other forms of intelligent life) has the possibility of expanding its knowledge without limit; and thus, by understanding the causal laws, to go beyond all conceivable limitations. (Thus through the understanding of causality and necessity is the way to freedom). On the other hand, if we fail to understand causality and necessity, both external nature + our own natures will enslave us).

Well, so much for what I am doing. Send my regards to Erich, Lili, and others in Princeton. And please write me soon.

Love
Dave

Letter 21. Folder C40, not dated.

[April/May 1952].

Universidade de São Paulo
Faculdade de Filosofia, Ciências e Letras
Caixa Postal: 8105
São Paulo

Dearest Hanna

I have had a lot of things to do, and therefore have delayed writing to you. There has been some trouble here with some very vicious characters, but it looks as if it is under control. I explained it to Eric, but perhaps I may have seemed somewhat alarmed in my first letter. Please let Eric know that the situation is not alarming, but that the letters I requested from Einstein would still be very helpful in the long run. Also tell him that I plan to answer his letter soon. Tell Lily that the statements about the Income Tax arrived a month too late. They should have been sent air mail. However, I independently filled out my tax, without the slip from Prentice-Hall.

I am glad to hear that your situation is improving, and will always be anxious to hear how you are doing. As for me, I am very busy, teaching classes (in Portuguese), engaging in intrigues with the two rats who are causing all the trouble, and working on my theory.

I was very glad to see that you understood the importance of the infinity of levels immediately. The substratum is another word for the ether, but I prefer "substratum", because "ether" implies something "ethereal" while the substratum is apparently very dense. You are right in saying that it leads to a commonsense view of the world, which at the same time can treat problems of the subtlest type. Erich is also very much in favour of this kind of idea. I have some more ideas, and as soon as they

crystallise a little, I'll let you hear some more about them. Meanwhile, please let me hear some more about you.

Some reactions to my theory are coming in. The older people like Pauli, Rosenfeld, + Bohr, object to it, but their objections are almost childish. I expect to publish some papers soon answering these objections. Among the younger people, especially the experimental physicists, there is much interest in it. Of course, the Institute says that it is "of no importance". Thus my theory has passed two important tests in its favor.

(1) It has been opposed by Pauli (Pauli has opposed every new idea that was ever suggested).

(2) The Institute people think it "unimportant".

Give my regards to Lily, and to Erich, and to Ben

Love

Dave

Letter 22. Folder C39, dated: Oct 6, 1953.

Universidade de São Paulo
Faculdade de Filosofia, Ciências e Letras
Caixa Postal: 8105
São Paulo

Dear Hanna

I shall have to apologise for not answering your last letter, but I have been tired and depressed, and always tended to put off answering you for this reason. I am glad to hear that you are well, and as happy as anyone can be expected to be in this age. I have also heard from Lily that you are in good health and spirits.

As for me, I am afraid that Brazil and I can never agree. First, there is the climate which is too warm for me (even in São Paulo and especially in Rio) and which makes it very hard for me to work. I could get used to the climate, if there were some compensating factor which was attractive, but there isn't. Then there is my health, which is poor here. I suffer from a very weakening form of diarrhoea 50% of the time. Doctors can't seem to find the cause, but I suspect that the cause is in the rather dirty conditions of the country, combined with the high temperatures, which is conducive to the growth of bacteria.

Now if there was something else worthwhile here, I could accept both the high temperature and the bacteria. However the University has nothing to offer – there are no good students, and the whole set up is (like the rest of Brazil) so disorganised that there is no hope to do much. The physics dep't contains a number of professors of very low moral character and practically no ability in physics, who are able to keep things in a continual state of turmoil, in which nothing constructive can be accomplished

Now I could get used to all of this if there were some people in São Paulo with whom I could have a close relationship. But the Brazilians are first of all a very individualistic lot – they rarely make friends even among themselves. Then their way of thinking seems to be different enough from mine so that there is little satisfaction

in talking to them. I have had a few friends here but these consisted of people from the U.S., Argentina, Chile, and France, who were here temporarily. It seems that of all the countries I could have chosen, Brazil is most alien to my own spirit. It is difficult to define the cause. But the problem manifests itself as a sort of complete lack of interest in trying to penetrate deeply into things, a sort of intellectual deadness, combined with a very superficial point of view, and a tendency to take things very easy. Even when they work hard, they take no passionate interest in their work, but merely a sort of utilitarian interest. I don't know whether I have analyzed the difference correctly, but it is really there. Other people have noted it too.

Finally, there is the city of São Paulo, which is practically unliveable. Although it looks nice from a distance, it is easily seen to be a disorganised, chaotic, poverty-ridden city from a closer inspection. Everything is falling apart. The traffic is horrible and the buses emit dense clouds of foul-smelling smoke into the hot sunshine, while the trolley cars make a never-ending din in which you can't even think, much less talk to someone. Although there is a terrific shortage of housing for poor people, no housing is built for them. Instead one sees nothing but expensive apartments going up, about two every block, making a terrific racket, so that it is almost impossible to find a quiet place to live (They start six o'clock every morning, many of them even on Sundays, and some have a night shift). Moreover, there is absolutely nothing to do in São Paulo. A typical idea of Sunday amusement is to stand in line for two hours and wait to enter a motion picture theatre. There are very few places near here worth visiting, and the hot sun makes hiking or walking out of the question. Moreover, travelling is impossible, as there is no place to visit. The roads and public transportation are very bad, while good food, water and lodging are unobtainable outside the 2 main cities (Rio & São Paulo). Even in Rio and São Paulo it is not safe to drink the water, and I cannot eat in restaurants without getting sick, while in the interior, everybody gets sick unless he carries his own food and water.

So you can see that I am practically alone (except for an American couple that I have managed to have invited down here, the Schillers), my health is bad, and there is little possibility for constructive work. I am good and sick of it, and I'm becoming depressed. In fact, in the past six months, I have made little progress on my work. I am becoming discouraged also because I lack contact with other people, and feel that there is a general lack of interest in new ideas among physicists throughout the world. Everybody pays lip service to the necessity of new ideas, but nobody really wants to bother, unless they are presented with some magic formula that solves all problems.

Lily has written me a letter in which she mentions Phil Morrison's suggestions that I return to the U.S. I cannot accept these suggestions. First, there is the problem of the immunity statutes. I saw recently in the N.Y. Times that the administration is going to press next year for the passage of such laws, which will compel people to testify in Congressional investigations. Hence, if I returned, I would be in jail in a year or two. Actually, for the present, my position would be much more dangerous than that of Weinberg. For they would not offer him immunity from prosecution in order to get him to testify, since he is the man that they are trying to get. Hence, it wouldn't make sense to promise him that he will not be prosecuted. Hence, he will

have the right to refuse to testify. But people whose main role is that of witnesses can be offered immunity, and then they either have to testify or go to jail.

Secondly, I think the situation in the US will remain bad and get worse for the next 10 to 20 years. Not only could I not get a job (except perhaps in industry) but a depression is very likely, so that the numbers of jobs will be low for everybody. Also, they are already cutting support of non-military research by not renewing Army, Navy, and A.E.C. contracts, so that even if the general economic level remains high for a while, there will be plenty of unemployed physicists, who cannot or do not wish to work on military research.

So I think the only hope for a solution to my problems is to go to Europe. How to do this I do not know, for the present. But maybe something can be worked out.

Please let me hear from you again soon

As ever

Dave

PS. Did Lili get my answer to her letter [?]

Letter 23. Folder C39, dated: Nov 8, 1953.

Universidade de São Paulo
 Faculdade de Filosofia, Ciências e Letras
 Caixa Postal: 8105
 São Paulo

Dear Hanna

Yesterday I sent you a rather depressing letter. Please don't take it too seriously, as it was the result of a combination of particularly difficult circumstances that was making me feel bad. I am not always in such a low mood. I apologise for sending you that letter, and promise not to send such letters to you or to other people hereafter. What I said in there is true enough – I do want intensely to leave Brazil, but I shall nevertheless make an effort to fight the feeling of hopelessness that occasionally overwhelms me. I also have a difficult problem of decision, as in some ways I would like to return to the US (to see all my old friends) but very much doubt the wisdom of doing this for the next 5 to 10 years. But to stay here for 5 to 10 years is out of the question.

I am glad to hear that you have “found” yourself to some extent and have begun to develop a new level of consciousness. However, the problem is never really solved finally, and each of us needs continually to try to reach higher levels of understanding, as the situation develops, especially because life is so difficult these days and conditions change so rapidly. So you must not rest on your laurels, but should instead keep on working on the problem.

How is Erich doing? Has he made progress on his numerous books? Please send him my love. When I think of him now, I appreciate what a magnificent spirit he has, to keep struggling for his ideas, and to keep a youthful attitude. For that matter, the

same should be said about Einstein (even though I am in partial disagreement with him on scientific questions). Please give him my best regards.

I have made some progress on my ideas, but now I seem to be facing an impasse. Perhaps I must try some totally new track. Perhaps in a few days I shall write Erich a letter in which I shall try to summarize the situation. Naturally, the letter will really be meant for you too and for Lily.

As for starting on a new idea, I feel I could do this better in a more favorable environment. Here it is difficult. However, I have a great many things to write up on the existing state of my ideas, and this should keep me busy while I am still in Brazil.

As ever – Dave

Letters to Lilly Kahler

Letter 24. Folder C96, dated: Dec 3, 1953.

Dear Lili

Thanks a lot for your second letter. I am glad to hear that Erich is better and that everyone is doing well.

As I said in my 3rd letter to Hanna, the situation looks a little better here than it did before. I have just managed to get a permanent identity card, which means that I can stay here indefinitely if I should wish to, even without the passport. But to travel, I should have to take Brazilian citizenship, to get a Brazilian passport. This I cannot do in less than about 18 months from now; it may take two years.

There is a serious disadvantage of taking Brazilian citizenship. It will mean that I cannot return to the US for a long time. For according to the McCarran Act, the US will not give visas for non-citizens of the US to enter if they have ever had any so-called “Communitistic” connections.

A number of possible plans present themselves. First of all, I am not very happy about staying in Brazil. Einstein may be able to work independently of his surroundings, but I find that I can't. When I remain too isolated from people with whom I can have some relation, my thinking seems to dry up. I reach a stalemate, from which I can get out, only after discussions with other people. Even if these other people aren't experts, it seems to help me to formulate the problem by talking with them and to get their reactions. New ideas suggest themselves, which do not appear when I am just thinking by myself, as if I just discuss my ideas always with the same small group of people. Also, there is the relaxation which comes from having some relation with people. Without it, I tend to develop a very tense mood that makes work difficult. None of these things are available in Brazil, and I have little hope that there is any possibility for such things here. I think I know the country well enough to feel fairly sure of this.

Now a possibility is to try to get a job in England. Unfortunately all the British people that I know suggest that I first come there, and then something may develop. Unfortunately, I cannot get there without a passport. Perhaps if I already had a definite offer, I could get the passport back, but without an offer, my chance is zero.

A second possibility is Israel. I have been in touch with friends in Israel (Americans who went there). They find that they like the place. Scientifically, it is perhaps poorer than Brazil in experimental physics, but probably the chance of finding good people with whom to do theoretical work is better. I have been in touch with Rosen in Haifa (indirectly) and have learned that it would probably be possible to get me a job there. Israel would have the disadvantage that life is more difficult, but the advantage that there would probably be more people with whom I could have some kind of relationship.

There are two possible ways of getting to Israel. One is to arrange the job offer and apply to the State Dep't for a passport on the basis of this offer. Perhaps the Israeli gov't would be willing to make some representation to the State Dep't.

The second is to go to the Israeli embassy here and ask for a special document to travel to Israel. This method would imply that I intend to become a citizen there.

With either of these methods, I should need some help, especially in the form of letters of recommendation. Einstein's help would be especially good in this connection. I'm not asking him to do anything against his principles but would he:

(a) Write a letter of recommendation for me to get a job in a place like Haifa?

(b) In case of necessity, write a letter to the Israeli embassy in Brazil, suggesting that they give me a special document to travel to Israel?

I have not definitely made up my mind on this question; I probably have a few months to decide. If I could get an offer from England, I would leave Brazil immediately. Israel, however, is a more difficult question to decide.

Please give my regards to Einstein and to Mrs Dukas.

Love

Dave

P.S. The idea of my returning to the US is for the time absolutely out of the question. It seems clear that the US is coming very close to Fascism. In any case, McCarthy is running the State Dep't these days, so that I cannot imagine how I could ever get out of the country, if I once returned. Also, even industrial jobs are being investigated by Congress these days. It is the gov't's intention to make it impossible for anyone who opposes its policy to make a living. It is difficult to believe that they will leave open the chance for an industrial job.

Letter 25. Folder C96 (also C28), not dated.

[December 1953 (references to Christmas and last summer's visit of George Yevick and Jean-Pierre Vigier)].

Dear Lili

Thanks for your latest letter. I am glad to hear that everyone is well. Please give my best regards to Erich and to Hanna. Also best wishes to all for Christmas and New Year.

I thought that I would like to correct some wrong impressions that my letters seem to have conveyed. I am by no means satisfied with staying in Brazil. For a while, I

thought there would be an improvement in the physics dep't, but now it looks as if this won't happen. Let me explain that ever since I got here, there has been a vicious fight going on in the physics dep't. This fight started several years before I got here. It makes things very unpleasant here, and makes it almost impossible to do anything here to correct the bad situation. Let me also say that physics students are almost disappearing. A typical class may have 3 or 4 students, and the number who enter is decreasing every year. The students are not a very good, as they get bad training in high school, and equally bad training in the University. Also, there is a general atmosphere here, in which people don't feel any desire to work. Besides, after the students graduate, there are no jobs for them, except to teach at very low salaries in the high schools.

So you can see, the general morale here is low. I felt that if at least the fight in the physics dep't could be resolved, some improvement could be made. We spend 20% of our time here in meetings to discuss this fight fruitlessly, and in thinking & talking about it.

But even if the physics dep't could be improved, I could not stand living in Brazil. For I have no one to talk to, and nothing to do in my spare time. I cannot work efficiently if I have no relaxation from time to time. Life is so tedious here that each morning, I wonder how I am going to get through the day. Under these conditions, my ideas tend to dry up, and my work just simply does not get anywhere.

As for my health, I am already sick of going to doctors and taking tests, etc. There is simply nothing that doctors can do about it. The cause of my diarrhoea is clear. The food is bad, usually cooked in heavy fat, and not very clean. The weather is hot, and conducive to the growth of bacteria. I am sensitive to these bacteria. Some people are sensitive, some aren't. We had a visitor from France last summer, a very tough man, but he was sick every day with diarrhoea. Other visitors just didn't get sick at all. The best that you can do is to try to eat the cleanest, simplest food that you can find, and not to overeat. This helps, but at best, I can reduce the fraction of the time I have diarrhoea to about 1/2. Psychological depression tends to make the diarrhoea worse. And with my situation here, I alternate between 2 states. In one I feel depressed and hopeless. In the other I just feel hopeless without feeling depressed.

So you see, I must eventually get out of here. The idea of this staying here as a home, or of staying 10 to 20 years simply horrifies me. I don't see how I could possibly do it. It is like spending the rest of your life half-dead. On the other hand, for the next 2 or 3 years, at least, return to the US will also be impossible. I cannot agree with Phil Morrison's Utopian predictions. It is true that McCarthy's personal prestige may have dropped a bit, as a result of his attack on Truman. But as far as the issues are concerned, McCarthy won. For McCarthy's basic issue is that the most important problem facing the US is Communist espionage. This is really ridiculous. But Truman didn't answer it and indeed couldn't answer it. For Truman is the one who started all this anti-Communist hysteria. Anyway, the basic point is that the Republicans have decided to base the next election campaign on the issue of "Communism" and the Democrats will not answer back. So we can expect some big spy trials in the near future, and a lot of excitement generally. Let us see next November how the American people respond to this.

So in general, my feeling is that I must eventually get out of Brazil, but I will not return to the US until I saw clear evidence of a change in policy. I might be able to stand Brazil for another year or so, but I am afraid that a much longer period would be very bad indeed.

Well, I hope that makes my situation clear. Thanks very much for your efforts on my behalf thus far.

Love

Dave