

Russia, 1961

B. F. Skinner

B.F. Skinner's original introductory note on page 1 of the document.

In May, 1961, a delegation of behavioral scientists visited Russia, Czechoslovakia, and Poland under sponsorship of the National Academy of Sciences and the State Department. The members were: Professor and Mrs. Donald G. Marquis, Professor Robert K. Merton, Professor and Mrs. James G. Miller, Professor and Mrs. George P. Murdock, Dr. and Mrs. Francis H. Palmer, Professor Anatol Rapoport, Dr. Henry W. Riecken, Professor and Mrs. B. F. Skinner, Dr. and Mrs. Ralph W. Tyler, Dr. Raymond W. Waggoner. The following comments were made whenever convenient on a portable dictating machine. My wife was often present as I dictated, and contributed details. A few changes have been made to put material in order, and in some cases forgetful repetitions have been deleted. Otherwise the record stands as made. It was prepared for purely personal reasons and contains trivialities, irrelevancies, first impressions subject to change, some pretty standard responses of new visitors to Russia, plus (it is hoped) a few fresh glimpses and reactions. It has been duplicated for limited circulation to members of the delegation and friends. Reproduction is not authorized¹.

Nota introductoria original de B.F. Skinner en la primera página del documento.

En mayo de 1961, una delegación de científicos de la conducta visitó Rusia, Checoslovaquia y Polonia bajo el patrocinio de la Academia Nacional de Ciencias y del Departamento del Estado. Los integrantes del grupo fueron los siguientes: Profesor Donald G. Marquis y su esposa, Profesor Robert K. Merton, Profesor James G. Miller y su esposa, Profesor George P. Murdock y su esposa, Dr. Francis H. Palmer y su esposa, Profesor Anatol Rapoport, Dr. Henry W. Riecken, Profesor B. F. Skinner y su esposa, Dr. Ralph W. Tyler y su esposa y Dr. Raymond W. Waggoner. Siempre que fuera oportuno, se grabaron los comentarios en una grabadora portátil. A menudo mi esposa estaba presente cuando yo dictaba y aportaba detalles. Se han realizado algunos cambios para ordenar el material y en algunos casos se han eliminado repeticiones debidas al despiste. En lo demás, queda el registro tal y como se hizo. Se preparó por razones totalmente personales y contiene trivialidades, irrelevancias, primeras impresiones sujetas a cambio, algunas respuestas bastante típicas de personas que visitan Rusia por primera vez, y además (así se espera) unos cuantos vistazos y reacciones frescos. Se ha duplicado para permitir su circulación limitada a los miembros de la delegación y amigos. No se autoriza su reproducción.

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We arrived at Idlewild at three o'clock on Wednesday, May 3, taking no chances on bad weather and allowing for a train if necessary. At five we joined the Marquises¹ and a little later the Murdocks². Shortly afterward, the Palmers³ arrived with bad news: the Russian Embassy had closed at five o'clock in Washington with no action on our visas. Jim Miller⁴ called friends in America and the American Embassy in Moscow, hoping to get action tomorrow. In conclave we decided that, the Ford Foundation permitting, we would prefer to wait for our visas in London or other points nearer Russia. We went with the Marquises (and with Julie who had come out to the airport to see us off) to Manhattan where we saw Zero Mostel in *Rhinoceros*. We spent a pleasant Thursday in New York and returned to Idlewild in the evening. The Ford Foundation has agreed that we shall spend a month somewhere in Europe—in Russia if they permit, otherwise in other laboratories and anthropological and sociological stations in other countries—say, Sweden, Poland, Czechoslovakia, Germany, France, and England. As I dictate this, we have checked in for the Pan American flight this evening, although our passports have not yet come from Washington. Hank Riecken⁵ has been standing by in Washington and Jim went down last night to put on whatever pressure may be available.

Early Friday morning, May 5, in the London airport waiting for customs. Jim worked busily and well in Washington yesterday and turned up at the airport at 6:30 with passports

but no visas. He is trying to collect our visas here in London (in one-and-a-half hours) before a scheduled flight to Moscow, but there seems to be little hope that we will get off today.

Saturday, May 6, 5:30 a.m. in the Mount Royal Hotel in London. Jim and Anatol⁶ had an unhappy day at the Embassy yesterday but at 4:30 Anatol was called and asked to come back. On the strength of this, Frank Palmer went to KLM to make reservations for an early morning flight. By 5:30 he had returned with tickets through to Moscow, and by 6:30 Jim and Anatol turned up with our passports, beautifully stamped with Russian visas. This was celebrated in the bar of the Mount Royal and with dinner at the Coq d'Or off Piccadilly, where we tested Merton's⁷ Theory—(that waiters and head waiters are there to serve you and ought to be able to write individual bills). The place went into an uproar, and we called it off but discovered in the end that they had worked it out, submitting a diagram of the table with each little *addition* in its proper place. Then, pure bedlam for 20 minutes, ending with the discovery that the banker, Frank Palmer, had apparently been overcharged. Most of us sneaked away while negotiations were completed. We are up early this morning to make KLM at eight o'clock for Amsterdam, whence on to Moscow after a small delay.

9:30 p.m. Saturday, May 6. We have just arrived at the Sovietskaya Hotel. KLM got us to Amsterdam in time for a taxi ride and a boat tour of the canals, and we came on

¹ Donald G. Marquis (1908-1973) received his Ph.D. in Psychology from Yale. President of the APA in 1948. He directed the Departments of Psychology at the Universities of Yale and Michigan, and was Professor at the Sloan School of Management of MIT. Among other posts, he was Chairman of the Division of Social Science of the Ford Foundation Study Committee (which financed the trip to Russia), Chairman of the Committee on Human Resources, Research and Development Board, National Military Establishment and member of the Bioscience Advisory Committee of NASA.

² George P. Murdock (1897-1985) was considered the most influential anthropologist in the area of cross-cultural analysis. Specialized in compared ethnology, ethnography, and social theory. He developed compared studies of human relations. Professor at Yale for more than 30 years. He was the originator in 1937 of the Cross Cultural Survey, later known as the Human Relations Area Files.

³ Francis H. Palmer, specialist in Language and Childhood Education, and member of the Social Science Research Council Committee on Cognitive Research between 1972 and 1976.

⁴ James G. Miller (1916-2002) studied Psychology and Medicine at Harvard. Alfred N. Whitehead made a lasting impression on him during those years. During WWII, he served in the Office of Strategic Services (OSS) Assessment Unit. After the war, he became the first Chief of the new Clinical Psychology Section in the Central Office of the Veterans' Administration in Washington, D.C. Elected President of the Division of Clinical Psychology of the American Psychological Association, (1958 and 1959). He worked in the Universities of Chicago, Michigan, Cleveland State, Johns Hopkins, Louisville, and California, among others. A pioneer of systems science, he originated the modern use of the term "behavioral science." For more than 30 years, Dr. Miller was editor of *Behavioral Science*.

⁵ Henry W. Riecken has been Professor at the Universities of Harvard, Minnesota, and Pennsylvania, where he is currently the Francis Boyer Professor of Behavioral Science Emeritus at the School of Medicine. Among other posts, he has been the Associate Director for Program Planning and Evaluation at the National Library of Medicine at the National Institutes of Health, Head of the NSF Divisions of Scientific Personnel and of Education, President of the Social Science Research Council, member of the Institute of Medicine at the National Academy of Science and Fellow of the American Academy of Arts & Sciences. Author, together with Festinger and Schachter, of the classic *When Prophecy Fails* (1956), among other distinctions, he has received the Hildreth Award from the Division of Psychologists in Public Service (APA).

⁶ Anatol Rapoport was born in Russia in 1911 and arrived to the USA in 1922. He studied at the University of Chicago. Dr. Rapoport has made significant contributions, among others, in the fields of mathematical biology, mathematical theories of social interaction, the theory of games, and the general theory of systems. He attempted to apply his view of the theory of conflict to the problems of nuclear disarmament and international politics. Rapoport has belonged to the Center for Advanced Studies in the Behavioral Sciences and was the founder of the Society for General Systems Research. He has been a Professor at the University of Chicago, the University of Michigan, and the University of Toronto, among others.

to Moscow this evening. We were met at the plane by Luria⁸ and Leontiev⁹ and taken to a magnificent room in the airport, where we sat around informally and discussed plans. The room must have had a 25-foot ceiling, and the floor was solidly covered wall-to-wall with a series of oriental rugs, probably machine-made, fastened together at the edges. There was a 10-foot chandelier of faience, crystal, and gold. A booklet on the table was less an advertisement for Aeroflot than an explanation to the uninitiated of what they would find if they travelled by air. It reminded us of the Russian cookbook which Eve saw in Cambridge, which was mainly an exposition of how beautifully one might prepare food.

Luria had known of our arrival for only two hours but had already outlined a full week of activity. After a long and pleasant discussion we were told that our baggage would be cleared without inspection and that cars were waiting to take us to Moscow. There were three limousines—Zims—resembling a good car of about ten years ago in America. We rode comfortably along the straight highway to Moscow. Luria explained that the poor houses that we saw along the road would not be there within a few years but that they were now comfortable and warm in winter. There was certainly evidence of very extensive building, with apartment houses under construction for miles. We passed buses and trackless trolleys, which at this time of night (dusk just closing in) were jammed with people on their way home. Luria is obviously sold on the present regime and took delight, in a pleasant way, in reminding us of our inadequacies. For example, he commented on the fact that he and Sokolov¹⁰ had had their baggage carefully searched by American customs, whereas we were allowed to go

through without having our bags opened. He congratulated us on our first aeronaut but referred to his “rather short journey.” The spirit of the discussion was completely friendly and warm, however.

The hotel is large, quiet, ornate, and rather pretentious. Our bathroom, for example, has an old style tub with white tile built up around it to give a modern touch. There is a heated towel rack, in the English fashion, and adequate facilities, including a hand douche in addition to the usual shower. Our suite has an anteroom separated by double doors and a bedroom which can be closed off by drawing large velvet curtains. A small cabinet contains many ceramic figures and vases. On the wall is a large realistic picture of lilacs, in a pre-impressionist style, but at least it is a genuine oil painting, not a print. Whatever one may think of the decor, everything is solid, relatively luxurious, and shows an interest in something beyond the essentials. In short, we are impressed.

We met in the lobby about 9:30 this evening and were taken to a special dining room, where a long table was prepared for us. There was another long table with a party of about 15, and two or three smaller parties. Actually, the room is a sort of balcony overlooking a very large dining room in which people were dining gaily at that hour. One of the members of our group noticed on the floor of our balcony, very inconspicuously placed behind a curtain, an immense oil painting of Stalin—demoted—but not yet removed. Shortly after we arrived, a jazz band began to play straight American jazz, and there was dancing. The people were young, well-dressed, and nicely groomed. Our dinner began with assorted cold meats, including sturgeon,

⁷ Robert K. Merton (1910-2003) began his studies in Temple University and earned his M.A. and Ph.D. from Harvard. He became chairman of the Department of Sociology at Tulane. Merton moved to Columbia in 1941, where he was Associate Director of the Bureau of Applied Social Research, Giddings Professor of Sociology, and University Professor until his retirement in 1979. Leader of structural-functional analysis in sociology and pioneer of Sociology of Science, Merton is best known for his work, *Social Theory and Social Structure*. Among other distinctions, he was awarded the National Medal of Science.

⁸ Alexander R. Luria (1902-1977), neuropsychologist and doctor. He studied in the University of Kazan, Russia. He worked in the Psychology Institute of Moscow, where he was dedicated to the “combined motor method.” There he met L. S. Vygotski in 1924 and, together with A. N. Leontiev, they developed the “historical-cultural” or “socio-historical” approach to Psychology, with special emphasis on the study of language, thinking, children’s play, and compared psychology (i.e., research in Central Asia). He specialized in the study of aphasia from the viewpoint of the relations between language, thought, and cortical functions, and in the study of compensatory functions. Luria carried out important studies on persons with brain lesions during WWII. Co-founder of the Psychology department of the State University of Moscow. Considered founder of the Russian school of Neuropsychology. Member of various Academies of Science and Associations of Psychology around the world and doctor honoris causa of numerous universities.

⁹ Aleksei N. Leontiev (1903-1979), psychologist. Between 1924 and 1931 he worked in Moscow with A. R. Luria and L. S. Vygotski, studying the formation mechanisms of higher psychological functions (especially processes of attention, memory, and mediation). He subsequently worked in Jarkov (Ukraine) and during WWII in Sverdlovsk (Russia). Considered the father of one of the Russian activity theories, his experimental and theoretical works focused on the development of the psyche. Co-founder of the Psychology Department of the State University of Moscow and Dean of the Psychology Faculty.

¹⁰ Evgeni N. Sokolov (1920), psychophysicologist. Military interpreter during WWII. During his studies, he investigated perception under the direction of S. L. Rubinshtein. Full professor of Psychophysiology in the Psychology Faculty of the State University of Moscow. He also worked in the Biology Faculty, and he collaborated with A. R. Luria in the Institute of Defectology. He carried out important research in perception. Pioneer in the study of the neural mechanisms of orienting behavior. Founder of the scientific program of research in computerized learning.

roast beef, ham, and cold vegetables. We then had beef Stroganof and french fried potatoes. We began with a vodka toast and continued with red and white sparkling wine, some sort of orange-flavored soft drink, and beer. There was ice cream for those who wanted it, and large cups of black coffee. We finished at about 11:30. The employees were most cordial. Everyone smiles and appreciates our attempts at Russian. The elevator operator carefully explained to Eve how to pronounce the numbers of the floors. So far, everyone has gone out of his way to make our visit pleasant and profitable.

Sunday, May 7, at the end of a long day. We slept through until nine o'clock this morning, joined some of the others for a breakfast which, as agreed upon the night before, consisted of cheese omelet with toast, black coffee, and a nondescript but rather good cider-and-raisin juice. Service was very slow. After breakfast we joined Luria, the Academy guide assigned to us for our stay in Moscow, Yuri Burilkov, and a charming young psychologist, Olga Vinogradova¹¹, an assistant to Sokolov. There is an epidemic of the flu in Moscow, and standing on the steps of the Sovietskaya Hotel, we all took a vaccine supplied by Luria. It consisted of a yellow powder which one put on the back of one's hand and took like snuff. We then set out by taxi, small Volgas this time, for the Hotel Metropol, where we were able to buy rubles and stamps. The streets were absolutely jammed with Sunday shoppers and sightseers. All the shops are open. The people, in part Russian tourists but mostly Moscow citizens, were dressed in rather nondescript but in general sensible and attractive clothing.

In front of the Metropol, where we were waiting for our group to assemble, boys came up to us and showed us various kinds of pins. Speaking a few phrases in English, they asked for chewing gum, pencils, pens, and American coins for their collections. It turned out that they were not begging but offering to exchange the enameled pins. I misunderstood them and gave one boy three sticks of gum left in my pocket from the airplane. He went off to examine what I had given him and then came back quite honestly and handed me a pin. The boys were all very well behaved. Later, when Eve reported to a boy that she had nothing left to give him, he reached up, put a pin on her lapel, said "Souvenir," and walked away.

We first went to the Kremlin, which is very light and gay, Italianate and Byzantine in its architecture, and delightful. It was crowded with people. We visited several churches. Luria is especially interested in religious art and explained the good and the bad. He showed us the tombs

of the czars and the seats where the czar and the pope and Ivan the Terrible sat during service. We saw the changing of the guard at Lenin's (and Stalin's) tomb and the beginning of the stream of people who visit it. It would have taken us too much time to join them. Everyone was friendly and informal and seemed to be having a good but quiet time. Once or twice we attracted attention with our laughter. The children were well behaved, well dressed, and absolutely charming. Great attention is paid to children. There is a huge building in Moscow just for children called Children's World; there is a children theatre, and one of the performances we are scheduled to see this week is a puppet show which is, I suppose, primarily for children. On the subway, I saw a man get up and give his seat to a six-year-old girl. (Also, a young man sitting beside a girl stood up and gave his place to Eve. This is the first time this has happened in Eve's experience for 20 years.)

From the Kremlin, we went to something called the Agricultural and Industrial Exposition, 700 hundred acres of land very much like a permanent world or state fair. A pavilion represents each of the Soviet States. We visited the pavilion of Uzbek—very Asiatic yet full of proud achievements. There is a replica of a whole field of cotton, and examples of the cotton-processing equipment which is manufactured in Uzbek. They also have silk manufactories, and there were samples of their silk materials. Everyone is urging us to go to Tashkent and Samarkand. We also visited the pavilion of the Academy of Science where we saw models of all the satellites. There was a large picture of Yuri Gagarin at the entrance. Incidentally, we were able to buy air-mail stamps celebrating Gagarin's flight. In the Academy of Science pavilion we saw a short movie describing the training of space pilots. The narrator spoke in excellent American. In spite of Luria's insistence that this was a Russian speaking good English, we were convinced that it must have been an American voice. We had a late afternoon dinner at a restaurant at the Exposition. It was another room 20 feet high, filled with people from all parts of Russia enjoying a meal. They were obviously from the upper classes, the lower classes buying sausages and ice cream from vendors all over the grounds of the Exposition. We had an excellent borscht, followed by chicken Kiev (chicken which has been pounded flat, filled with butter, then rolled and sealed and fried in deep fat) with fried potatoes. (There is a danger in cutting into the chicken Kiev that you will squirt yourself in the eye with melted butter.) Near the end of the meal an orchestra arrived and began to play some of the most raucous American jazz I've ever heard. Luria was

¹¹ Olga S. Vinogradova (1929-2001), psychologist and neurobiologist. She made important contributions to the investigation of the cellular mechanisms of the hippocampus and of the orienting reflex. She worked with A. R. Luria on the study of concept formation. As of the late 50s, Vinogradova worked with the psychophysicologist E. N. Sokolov on the orienting reflex and perception mechanisms in human beings. Founder of the Laboratory of systemic organization of neurons, where the first neurotransplant of Russia was performed. She worked in the Institute of Theoretical and Experimental Biophysics of the Russian Academy of Sciences.

heartbroken. There were many sour notes. They played many old time favorites including "I Can't Give You Anything but Love, Baby," "On the Sunny Side of the Street," and "The Saints Go Marching In." We were marching out as they played the last.

Throughout the grounds of the Exposition, there are vending machines which sell beverages. Each contains an ordinary drinking glass. Upon finishing, one turns the glass upside down over a small opening. Pushing the glass down releases a jet of cleansing water. The next buyer picks up the glass, puts it in place, drops his coin, and consumes the beverage delivered. He then restores the glass to the cleaning area. I saw one boy getting a drink of water by pushing down the cleaning area with his finger and catching the jet in the glass.

We came back by the famous subway, and it really ought to be famous. It is immaculate. There is absolutely no litter of any sort. The decor is at times rather garish, but at other times in excellent taste and very luxurious. The escalator going into the subway near the Exposition is the longest I have ever been on. It seemed to go down hundreds of feet. The speed was about twice that of American escalators. You had to hop on and off with great agility, but the Russians seem to enjoy it. It certainly was an exhilarating ride. There were two changes before we could get to our hotel, but in each case we went through beautiful and immaculate stations. There was no crowding or pushing in spite of the fact that enormous crowds were being transported. The fare is five kopeks. When I commented on how clean the subways were, Luria replied that when they were first opened, they were so beautiful that no one would think of soiling them by throwing bits of paper about, that this has gone on ever since, and that there has never been any policing necessary. Incidentally, this seemed to be cleaning day. We saw a woman riding on the escalator shining the walls as she went.

Some of the rooms in our hotel have television but ours has only a radio. There is no station selector. You simply turn up the volume when you want to listen. Twice we heard speeches, which sounded political, and reports of the news. A moment ago we turned it on and got some Tchaikovsky. We were told on returning tonight that we should have left our key with the maid in the hall. There is at least one floor maid, often two or three, on duty. Since we didn't leave our key, they were not able to make our beds and clean our room. Evidently they have no other key (which will be news to the State Department, which warned us not to leave written material in our rooms if we didn't want it read.)

It would be quite unfair to call Moscow a beautiful city. There are no great vistas of wonderful buildings and trees. Everything is clean and well kept, but far short of brilliant, and even shabby. One suspects that someone has apportioned just the amount of money needed to keep the buildings in a sort of status quo. There are, of course, beautiful things to be seen around the Kremlin, but this is the ancient regime.

However, if there is not physical beauty, there is obviously a great concern for the welfare of the people, and the pleasant faces on the street are beautiful to look at.

Monday evening, May 8. It has been a long day. We had an early breakfast, then waited while Jim Miller and Yuri Burilkov worked on our plans for the rest of our visit to Russia. We plan to go to Leningrad Saturday night, after the puppet show, in order to have Sunday in Leningrad. We will probably get to Tashkent and Samarkand, although there is little excuse to do so from a professional point of view. We spent this morning in the Institute for Defectology which Luria headed until a year or two ago. We saw encephalographic work on feeble-minded and deaf children; we saw devices to aid the blind in reading normal texts and a device which looks like a flashlight but converts light into a sound of variable pitch to help the blind find their way around. The most fascinating part of the morning was devoted to a girl of perhaps seventeen who has been deaf and blind from birth. No effort had been made to get her to speak, but she operates a typewriter in both Braille and standard characters. She received signals in the palm of her hand and replied with a sign language read by her teacher. She was quite lovely and had a charming manner. Bob Merton had seen her before she was brought out for the demonstration, however, and he said that she showed signs of sheer panic. She was typing impassioned messages to her teacher, bending over to kiss her teacher's hand, and so on. When she came into our part of the room, however, she showed considerable poise and charm. She shrugged her shoulders in response to a question and smiled. She also blushed. We were told that all the gestures had been taught to her, although I doubt this. We were shown an elaborate series of houses and other objects which she had modeled in clay. I raised the question of how she had learned to scale down the house in which she lived to a model six inches wide, and I did not get a satisfactory answer. She was said to have learned about the house tactually, though I cannot see her climbing on the walls and roof. The model was well proportioned throughout and suggested that she had had experience in feeling of models of buildings, although this was by implication denied.

We returned to our hotel for a quick lunch of hors d'oeuvres and were then received at the Academy of Pedagogical Sciences by the Vice President, Leontiev. Leontiev is a vivacious, charming man who does not speak English well and chose to speak in Russian. Eve calls him "an ugly attractive man." He answered questions with great skill and pride in defending the Soviet way of doing things. For example, we asked him how he was first initiated into the field he represented, and he replied that everyone in Russia was an individualist and that one laid out plans, usually a year in advance, and usually was given the money needed to carry them out. We sat around a long green table at the Academy and were served tea and cakes and delicious chocolate candies wrapped in foil. (Later I bought some of

these candies and discovered they cost about 15¢ apiece.) It was no reception in the ordinary meaning of the word so that all of the worries of the ladies as to what they should wear came to nothing. The only member of the Academy present was the Vice President.

After the reception we were driven to the Pushkin Museum where we saw first of all an exhibition of caricatures by a Danish artist, many of them vicious attacks on Uncle Sam and all things American and Western European. I rather think it was meant that we should not see these; at least a strong suggestion was made that we stay in a group to be led by Burilkov. However, we broke up and moved about freely. We discovered relatively late that there was a magnificent collection of French impressionists and related sculptures, many well-known Picassos, Renoirs, Monets, and excellent ones which we had not seen reproduced. We also saw some very good Dutch paintings, including several excellent Rembrandts. Luria had rejoined us and asked whether I could have a few minutes to talk with him about professional matters. I suggested that he come back to our hotel for a drink. Instead, he called his wife and made arrangements for us to go to his home. We spent an extra half hour looking at pictures, during which time his wife was presumably preparing for us. Then we walked with him to the vicinity of his home, where we were met by his very charming daughter, a biologist, 22 years old. Luria is presumably a well-paid scientist. He has a country place and drives his own car. He was living, however, in a miserable tenement-style building, which he said he preferred because it was convenient to a large library, and to his laboratory. He pointed out that he was lucky because he had three rooms. We discovered, however, that his daughter and her husband were living with him, as apparently was an older woman who might have been the mother of Luria or Mrs. Luria. The living room was clean and nicely decorated, full of furniture, including several cabinets with excellent *objets d'art* and his daughter's desk, which contained not only a microscope but a great many puppets. He asked whether we were interested in Oriental art and brought out some very fine old Chinese scrolls and some recent Chinese paper work. He made us a present of a beautiful volume showing reproductions of very unusual religious frescos and icons by Rublov, the great Russian painter of the fifteenth century. His daughter wished us to have also a book by a modern Soviet artist, Nesteroff.¹² This is mediocre according to our standards but contains an excellent portrait of Pavlov in colour which I value. (The inevitable question has arisen as to whether we should give them anything. We have with us some inexpensive costume jewelry and a few plastic briefcases which seem a little out

of line with the magnificent presents we have received. We have decided to send his daughter and wife some jewelry and to send Luria something of greater value when we return to Cambridge.)

Luria was proud of the fact that his daughter was taking a degree in either cytology or histology and that she was publishing papers. She did not impress us as highly intellectual or even particularly interested in science. She was very much interested, however, in the jewelry which Eve was wearing, including a charm bracelet. In America she would probably be a normal, simple, popular young girl with no intellectual interests, just getting married. There was some suggestion that Mrs. Luria was also intellectual, but she impressed us as a simple housewife rather ill at ease in serving us a sweet wine from the Crimea with coffee and cake. I had the impression that it was a ritual not often practiced in Luria's household. However, we greatly appreciated their interest in showing us this courtesy. This sort of amenity is probably not yet a common part of Soviet life. They apologized repeatedly for the condition of the apartment, but so far as we could see it was perfectly clean and in order.

Luria offered to go back with us to the hotel by the Metro. We suggested that, instead, we take a taxi to save him an extra trip, but he seemed anxious to show us still another station in the Metro, and we finally settled for allowing him and his daughter to go on the Metro with us to the point of change. We then rode several stops with some anxiety but got off at the right station. We found ourselves in the midst of an enormous crowd which had just come out of a sports stadium. There must have been many tens of thousands of young people, most of them male between the ages of 15 and 30. They were pouring into the subway in two jammed escalators and, outside, they filled several streets going in all directions. We had to move along with them toward our hotel.

It is the style in Russia to cut the sleeves of men's coats at a length which almost covers the knuckles of each hand. This gives the impression of a hand-me-down coat or something picked up at the Salvation Army. Eve commented that it probably also makes us seem to have outgrown our clothes. In looking back over the last two days, it occurs to me that it is much easier to tell what you see than to understand what you are not seeing. For example, only after a full day at the Exposition seeing hundreds of children with their parents did it occur to me that not once had I heard a child cry. When a young boy tried to jump on one of the small rubber-tired trains which take you about the grounds, he fell and hurt himself quite badly, but there was not a tear or any vocalization. Another thing we discovered late was

¹² Mikhail V. Nesterov (1862-1942), painter. Representative of Russian orthodox art. Founder member of the Russian Painters' Union, he painted religious pictures. Since the 1917 Revolution, he only painted landscapes and portraits. His portrait of I. P. Pavlov (1935) was one of the most well known.

that bicycles were missing. We've seen only a very few. Evidently, the distances between the workers' homes and their places of work are too great to make bicycles a feasible means of transportation. Another thing: we have seen many hundreds of apartment houses being erected, but we have not seen a private house being built, although we are told that in certain areas this can be seen. There is an apartment across from the hotel, the first floor of which is still under construction although the top floors are already occupied. The almost exclusive means of transportation is the Metro plus many bus and trackless trolley systems. There are taxicabs but there are almost no taxi stands, and evidently they cannot be hailed or phoned for. They are mostly for tourists and serve the hotels. The drivers speak no English and are so unaccustomed to those who do not speak Russian that they try to get through to you by raising their voices and saying something over again in a different way.

We've seen several groups of school children. The girls have a lovely costume consisting of something like a jumper oven dresses of a slightly contrasting color. Boys have uniforms. Children moving along the street in groups are well behaved as a general rule.

Our room is quite comfortable. There is a supply of stationery, very hard-surfaced toilet paper, no sink stopper as expected, a rather slim supply of towels, including some very rough and unabsorbent bath towels, but a marvelous supply of coat hangers and pants hangers. The pillows are large and square, two to a bed, and are covered during the day with a pink silk spread.

The people we saw at the Museum were obviously from a better class than those at the Exposition, which is not surprising. They seem to be students, and are well dressed; the girls wear some makeup, and high heels. They were there in large numbers, crowding around the anti-American cartoons.

Seeing Luria's daughter today raises the whole question of whether women are indeed on equal terms with men in the Soviet culture. The statues and pictures at the exhibition yesterday represented the sexes in equal numbers. For every man with a pick there was a girl with a hoe. Today we saw several women engaged in what would be regarded as hard labor. One woman was painting a house, another was working on an asphalt pavement. At the Institute, there were many white-coated woman scientists. This is evidently an avowed goal and although one may suspect that it is not yet reached, it would appear that any young girl growing up in Moscow might well feel that the world is open to her

and that she could go into any line she liked. It is probably as real as the other statements of Russian goals: equality, freedom, peace, and so on, which are all held up as something available to all Russians. Whether or not they are at the moment real achievements, they are at least useful promises in motivating the people.

Wednesday, May 10. Miscellaneous observations. In the Metro a beggar moved slowly down the center of the car holding a folded cap. He leaned on a cane but carried no other indication of his profession. People dropped small coins into the cap.

It is evidently an important part of Russian hospitality that a guest sits down. Upon several occasions yesterday we crowded into small offices and would have preferred to remain standing during a discussion, but chairs were rounded up and brought into the room very awkwardly, and no one would proceed until we were all seated.

Sitting on a table was barely tolerated as a substitute for a chair. We also spent a great deal of time standing up and sitting down when new members of the group entered the room.

At the Institute which we visited yesterday, I noticed that all the doors of offices had inner padded linings of some black material extending well over the edges of the door. They appeared to be for soundproofing purposes, but my paranoid reaction was that they might be to prevent eavesdropping.

One "negative" observation: there are absolutely no portraits of Khrushchev to be seen. At the Pushkin Museum there was some sort of printed greeting signed by Khrushchev, but the Russians seem to have abandoned portraits of the leader. Lenin and Stalin are both in their tomb in the Kremlin, statues and portraits of Lenin appear everywhere, and a few statues of Stalin. But Khrushchev is not to be seen.

Yesterday, Tuesday, May 9, we visited Smirnov's¹³ laboratory at the Institute of Psychology. We listened to an assistant as he described the program of the Institute and heard a much too-long account of research on "thinking," having to do with ways in which color words are used in a given language. Smirnov himself entered the room halfway through the exposition, and the speaker thereupon doubled his energy output, which was already high, and soon began mopping his brow. He went into minute detail in spite of the fact that the time for our departure had passed and in spite of the fact that a colleague of his who was to have had some time to speak was eventually not given any time

¹³ Anatoly A. Smirnov (1894–1980), psychologist. He made important contributions to the Psychology of Memory, as well as to General Psychology, Developmental Psychology, Educational Psychology, and History of Psychology. Undergoing pressure in the 30s, he interrupted his works on Paidology and Psychotechnics. For 28 years, Smirnov was Director of the Institute of Psychology of the Russian Academy of Pedagogical Sciences and for more than two decades, chief editor of the most important Russian Psychology journal (*Voprosy Psikhologii*). He directed the organization of the XVIII International Psychology Congress in Moscow in 1966 and collaborated with G. I. Chelpanov, A. N. Leontiev, A. R. Luria, B. M. Teplov, A. V. Zaporozhets, and P. I. Zinchenko, among others.

at all. There is much evidence of a hierarchical structure among academic people. When Smirnov entered, the two young psychologists present stood up. Smirnov gestured for them to sit down and took his place sitting on the edge of the desk, but the two young Russians remained standing behind their chairs, neither wanting to sit down while Smirnov was sitting on a desk. Smirnov finally pushed them into chairs.

We saw only one piece of research of any interest. A student of Sokolov's is studying subvocal speech. He has a room full of excellent equipment made in Russia, including a cathode-ray oscilloscope, a high-speed tape recorder, a frequency analyzer, excellent polygraphs capable of recording in ink up to a hundred vibrations per second, one channel of which accumulated the energy output from a pair of electrodes. All this was connected to a subject seated in a chair with "galvanic skin" electrodes, multiple electrodes to measure general tension, and electrodes around the lips, larynx, and end of the tongue. It was excellent and expensive instrumentation but on a rather outmoded problem, although it was explained to us that Sokolov thought that with modern instrumentation something new might be turned up in the field of subvocal speech. The rest of the long morning was given over to elaborate programmatic expositions of what the Institute was designed to do. We are quite disturbed by this and are proposing to ask that expositions be limited to ten minutes so that we can see more active work and have details explained to us.

I scarcely got back to the hotel in time to pick up my slides and notes and to be driven to the Academy of Pedagogical Science. Leontiev introduced me very cordially, and Luria served as interpreter. We used Luria's personal slide projector purchased in the United States. I spoke on teaching machines. The audience was very attentive, very serious, and, I felt, rather shocked. Their questions resembled those which I have encountered upon scores of occasions in the United States: Was this not a form of regimentation? Did it permit the development of individual interests? Could insightful principles be taught? And so on—in general quite reactionary. Leontiev summed up at the end in, I thought, a very intelligent and cogent way. I stopped my talk early to allow time for our party to get back to the hotel before going to the theater. The questions ran on for more than half an hour, but we did get back in time to start off to the People's Theater in Tchaikowsky Hall.

It was excellent entertainment, consisting of chorus singing and dancing, balalaika, and an orchestra of oboes and horns backed up by a sextet of accordions. Singing was in a characteristic nasal style. There was a very beautiful chorus of young girls, and a very solid maternal chorus of older women with men to watch. Excellent Russian dancing. There was good spotlighting, and the company achieved surprising and delightful effects with very simple means. The hall was oval in shape with a small parterre and a circular balcony in amphitheater style. The seats were not awfully

comfortable. The stage was simple but very large. The building had marvellous acoustics, a large foyer for entertainment and refreshment, and a very efficient coat-rack service. (In theaters as well as in restaurants one is not allowed to take one's coat to one's seat. This includes women. Coats are left at the efficient coat-rooms.) After the theater, we took the Metro back to the hotel, where we dined at ten o'clock. We must be off again this morning (Wednesday, May 10) at 9:15 for a visit to the new University.

While the men were at the Institute yesterday, the women were taken to the Tretyakov Gallery to see Russian art. There were examples of Russian art from the beginning up to about 1957. The building consists of a series of rooms absolutely jammed with portraits, almost none of which are good. The earlier pictures which show scenes of Russian life have a great deal of historical interest. There are portraits of Catherine the Great, of Ivan the Terrible murdering his son, of the royal family hunting, and so forth. There are also many religious pictures, huge canvasses showing various biblical scenes. The modern pictures are really dreadful. Not one of them would have a chance of being hung in any museum outside of Russia. From the thirties you get pictures of happy workers and enormous canvasses of impossibly dull subjects. One, showing women laboring in a wheat field, was called *Bread*. It is interesting that before the Revolution there were many pictures showing social criticism—many pictures of beggars, for example.

The women had told their guide not to come back for them, and after finishing at the Museum they went to a restaurant, the Budapest, where they had an excellent meal of Hungarian goulash. After that they went to GUM, the large department store. This building is as crowded as reported but much more attractive. The skylight makes it bright and gay and lacy in appearance. Silk summer dresses were 44 rubles, and shoes were 22 rubles, but for 37 rubles one could buy very stylish, well-made wool suits. The women saw beautiful Persian lamb coats in various shades of gray for 110 rubles. They couldn't understand this and were examining them carefully when a salesgirl came up and said "Synthetic."

There were one or two shops which sold antiques—such things as jewelry, vodka cups, after-dinner cups and saucers, and so forth, very beautiful and expensive. Barbara Palmer and Eve bought vodka, which costs about the same as in the States though it tastes much better, and while they were at the counter a man came to them and said in English "Vodka is very bad for ladies," and showed them his own bottle which contained wine. Eve told him the vodka was for her husband, and he seemed much happier. There were plenty of canned goods and elaborate pastries and candies for sale, and there were crowds around them. When they asked Yuri about the high price of clothing, he pointed out that in America we pay 25% of our income for housing, whereas it is never above 10% in Russia and is more apt to be 6%. Barbara and Eve took a cab back to the hotel. Both cab

drivers and a doorman at the restaurant who got them a taxi accepted tips as if it were quite customary, though the people who have not been tipped have not been discourteous. They had tea in the downstairs restaurant of the hotel. The headwaiter in the restaurant wore white tie and tails.

Six p.m., Wednesday, May 10. Most of our group spent the day at the new University. Eve and Barbara Palmer, however, went shopping and lunching in the city. We drove to the University in taxis and spent most of the time in the Department of Biology in various branches of Sokolov's laboratory. The University is magnificent, although the architectural style, particularly the exterior, is in pretty bad taste according to Western standards. Almost all the corridors are marble, and the offices and laboratories are very well built. Many floors are parquet and are mopped every morning, with the result that they have worn quickly and irregularly.

We saw many experiments on conditioned reflexes, all of them introduced with references to the higher nervous activities. Many included instrumental or operant conditioning devices, but the techniques were quite antiquated. In one experiment a dog responded to various signals by jumping on, or stepping on, or pushing against various levers or platforms. No conditioned reinforcer was used and the reinforcement was usually delayed. They were using the performances as a baseline for studying inhibitory signals. Actually the control of the behavior, according to our standards, was completely inadequate. This was true of simpler apparatuses in which rabbits pulled levers. (Fish and turtles operated similar equipment which we did not see.) In general, behavior is poorly analyzed and theories flourish abundantly. Very sweeping statements about the implications of the experiments for our understanding of the nervous system are common. I have never seen such a devastating effect of physiological theories on research.

The building was full of students, of many nationalities. We saw what was said to be a typical student's room or rather pair of rooms, for each student has his own small but private quarters, each pair sharing a common bathroom. There were many bookshops conveniently located, and students were always buying books. We were startled at the prices until we discovered that many of them were printed in the old system and are now actually only one tenth as expensive as they appeared to be. In one stand, the works of Lenin were conspicuously displayed.

The scientific equipment in many cases was quite primitive, although we saw elaborate electronic amplifiers and recording devices made in France. In many laboratories I photographed portraits of Pavlov. We were taken to the top of the tower of the University and shown the magnificent view of Moscow, which includes miles upon miles of apartment houses newly constructed. I have not yet seen a private house. We dined in what I took to be faculty quarters, although there seemed to be students around many tables. We had an excellent lunch. I then came back to the hotel and took a longed-for nap.

Eve and Barbara spent the day entirely on their own, getting along on their gradually improving Russian. They were given instructions as to the station they should get off at on the Metro but it appeared that there was no such station on the line they were on. A young man seeing them studying the map offered his services and went beyond his own stop to make sure they got off at the right place. Throughout the day they found everyone most helpful and cordial. After leaving the station, they asked a very charming woman where they could find Red Square, using their guidebook Russian. She told them in Russian something of her own activities and explained that she was on her way to GUM and went with them as far as Red Square. Eve was able to discover from a sign that Lenin's tomb was to be open at one o'clock. They passed the time by visiting St. Basil's. At St. Basil's a woman looking at the art began to speak to them in Russian. When Eve said in Russian "I do not understand," the woman took this to mean that she did not understand the art and readily agreed. After she talked again for a while, Eve said "I agree," and the woman departed thinking that she had been talking to Eve. Later they asked a well-dressed young man where they could get coffee, and he took them to GUM where you buy coffee in the can. They then explained that they wanted to sit down and drink coffee, and he took them to the Metropol. He refused their invitation to join them, saying that he had already had coffee. He gave Eve a pin, and asked her if she like rock and roll. When she said she did not and asked him whether he did, he proudly explained that he liked both classical music and rock and roll but didn't have time for either. They then returned to Lenin's tomb. They had just shut the gates, but the guides spotted them as American women, let them enter, and put them at about the middle of the line so that they had only about half the usual time to wait. In Lenin's tomb you descend a stairway and move around the edge of an enclosure where you can see the figures of Lenin and Stalin from three sides. There is complete silence, the people move rapidly by, and there is nothing in the tomb except the two figures and a flag. They are lying on red pillows bathed in pink light, Lenin in ordinary dress, Stalin in uniform. It was impressive.

They had lunch at the Hotel National. At a nearby table, a woman speaking English with an Australian accent was arguing the advantages of communism to a Negro and an American man. Answering questions about religion, she explained that if Christianity had been followed according to the principles set forth by Christ there would have been no need for Karl Marx. The American brought up the work of Rhine to prove the existence of something beyond the material, and the woman pooh-pooed the results, classifying them with the occult, which she also dismissed.

Leaving the restaurant, Eve and Barbara asked the doorman about a taxi. He finally telephoned for one, which arrived. He accepted a small tip. There was unflinching courtesy on the part of everyone they met all day. After lunch they went to the Children's World, which is a large

department store exclusively for children. Upstairs were clothes, expensive as all clothes are in Russia. The first floor was devoted completely to toys. The women tried to find toys which might be related to war. There were no tommy-guns, machine guns, swords, sabres, soldiers, tanks—nothing of a military nature except two water pistols, one of them only two inches long. Large crowds of boys hung round demonstrations of radios and radio kits. Some toy which was based on football was being explained carefully to children by a saleswoman.

Earlier they had gone to the Lenin Museum, which the woman they met in the street had told them about. Everything connected with Lenin was on exhibition, including what was evidently a model of the train in which he was taken from Switzerland to Russia to start the revolution. There were large groups of schoolchildren in classes visiting the Museum and all of the objects were carefully explained to them.

At the University we saw a very large swimming pool arranged for racing and diving contests. We also saw a gymnasium in which two girls were practicing walking and turning on a very narrow beam. One girl was practicing on a beam resting on a pad, the other on a beam 8 or 10 feet in the air. At one point she fell and jumped to the pad. Another time she deliberately took some kind of a spring from the top and landed on the pad. Both wore black leotards pulled very tight and with bare legs. This has been so far the only sign of the female anatomy in Russia; I'm curious as to what sexual relations can be like. At the folk dancing last night, for example, the dancers spun around a great deal, but they wore slips which stayed barrel-shaped under their spreading skirts. There seems to be no exploitation of sex for commercial purposes.

Tonight for the first time an American flag appeared on our table. Heretofore there have been flags on all the other tables but not on ours. At the moment there are Italian, Cuban, and Polish flags in the dining room. Earlier there was an African group and a group from Southeast Asia. These were sometimes accompanied by Russian officers or representatives of the government. We have had with us, as for example tonight, Yuri Burilkov and Olga Vinogradova.

Thursday, May 11. After breakfast in our room, Ralph Tyler¹⁴, Frank Palmer, and I went to an experimental school where we met Professor Elkonin¹⁵. He has been working for only two or three years but has really analyzed the teaching of arithmetic, writing, and reading in a very effective way. In his office we could watch a classroom in action via closed circuit TV. He explained his way of analyzing the teaching of arithmetic with blocks something like the Cuisinière blocks. He also later explained to us how he taught reading and spelling beginning with the component sounds in words. To take an English example, a picture of a cat would have three boxes below it. The student would put a small counter in each box as he identified each of the three sounds—a sort of spelling without letters. When students could correctly identify the sounds in words, they were then taught the vowels. This was done first because in Russian the values of the consonants depend upon the following vowels. Elkonin had actually devised a small teaching machine consisting of a cardboard cutout with strips of paper bearing letters which slid back and forth through openings. The children were taught to move these strips and to pronounce the words thus produced, many of them not making sense.

At our request, we were permitted to visit a first-grade classroom. It was a stunning experience. The room contained 28 beautiful work tables with blue plastic tops and legs of adjustable height. Several students were absent, but we were told that the average number of students in a classroom in Russia is 17. Possibly offsetting the absence of military toys in the Children's World, in the back of the classroom was a large poster showing soldiers in action and across the top the words "The Glory of the Russian Army." Our friend Yuri tells me, however, that this was a temporary part of a recent celebration of Army Day.

The teacher was extremely clever. This was an experimental school and her methods had not yet been generally put into practice. We saw, first of all, a lesson in writing. These first-grade students wrote with fountain pens in work-books. At the top of each page the student wrote the date without being told, and then copied sentences from the blackboard, adding missing syllables. He also copied sentences from the blackboard and underlined accented syllables. I saw students pronouncing the words to themselves

¹⁴ Ralph W. Tyler (1902-1994) studied at Doane College, the University of Nebraska, and the University of Chicago, where he received his Ph.D. in Educational Psychology. He directed the Department of Educational Evaluation of Ohio State University. First Director of the Center for Advanced Study in the Behavioral Sciences at Stanford. First President of the National Academy of Education. Tyler was a member of the National Committee on Teacher Education, and belonged to the National Science Board from 1962 to 1968. His main contributions were in the field of Instructional Development and Curricular Studies.

¹⁵ Daniil B. Elkonin (1904-1984), psychologist. Specialist in Child Psychology, author of the theory of stages in psychological development. Disciple and collaborator of L. S. Vygotski. He belonged to the historical-cultural school and worked with A. N. Leontiev, A. R. Luria, A. V. Zaporozhets, L. I. Bozhovich, and P. Ya. Galperin. He developed important theoretical, methodological, and experimental works in the Psychology of Play, Teaching and Learning. He was the Director of several laboratories in the Institute of Psychology of Moscow and Professor of the Psychology Faculty of the State University of Moscow.

until they discovered which syllables were accented. All seem to write well, in a good hand, following ruled paper where the heights of the smaller letters were indicated by a top line. The students were well dressed, the boys in gray suits, the girls in brown dresses and black jumpers. Most of the girls had pigtails and bows, but there were no bright colors. When we entered the room, the students all stood up rigidly at their desks until we had seated ourselves. In answering a question from the teacher, each student stood up, often just for a quick "Da" or "Nyet." This meant that they were jumping up and down most of the time, pushing their chairs around a good deal. It seemed like a waste of energy, but the children would have been wasting it in some other way if they were not bobbing up and down.

In arithmetic, the children had constructed multiplication tables as far as 10 x 10. A problem was dictated, and the children copied it and wrote their answers. The teacher then asked several students their answers. If they all agreed, the answer was taken as correct, the students correcting their own papers. The teacher then gave mental arithmetic problems, and the students held up their hands as soon as they had the answers. Again, she would call on several, and if all answers agreed, that settled it. I do not know what she would have done if they had all come up with the same wrong answer.

If this was all amazing for a first-grade class, there was more to come when they turned to reading. A child would stand up in front of the class and read. After perhaps six or eight lines, the student would stop, and the teacher would ask the class to criticize. Most of the criticisms were positive. Some of them, as translated to us, were: he read with great expression, he read phrases rather than single words, he stopped between sentences, and he pronounced all the words correctly. Occasionally a mistake would be pointed out. After each passage had been evaluated, the children agreed on the grade the child should be given. Most got a full score of 5. Only a real mistake of some sort seemed to bring the score down. One boy, possibly stimulated by our presence, read very rapidly. The first criticism from the class was that he went too fast, as was indeed the case. The children were full of good humor, kept eyeing us and smiling, and could not have been more beautiful or delightful. Later, as we were leaving the building, this class was playing out in the courtyard. They recognized us and shouted "Dass vee dahn ya." Before leaving, however, we were treated to wine, tea, and delicious cakes in the principal's office.

There is something about the convention of tea and cake which I have not figured out. On several occasions, a table has been set, glasses of wine and tea have been poured, and then no one touches anything. In America, the host would

pass the cakes and would pick up his glass first. We all sit in embarrassment and no one does anything. Finally, in a flurry of slight movements, things begin. Evidently guests are supposed to reach for cakes, pick up their glasses, and drink, but this seems to us so impolite that we hesitate to do it.

We returned to the Sovietskaya for lunch, and then three of us visited the laboratories of Professor Anokhin¹⁶—a student of Pavlov who is still a professor at the university. He has many young people working with him from different parts of the world, with excellent equipment—very elaborate 15- or 20-channel recorders made in Denmark or France, tape recorders of variable speed to make pen-recorded analyses of responses from microelectrodes, and so on. There were classical Pavlovian setups with the addition of implanted electrodes. After we had been through the laboratory, we were treated to champagne, delicious cakes, and slices of cheese served by a beautiful "friend" of the professor. It is the practice to photograph all visitors to Anokhin's laboratory. We were followed about by a cameraman with a flashgun and then posed for a standard picture sitting on a divan in Setchenov's laboratory which is now a small museum. A picture of Setchenov's wife is turned facing the camera. There were many pictures of Pavlov, and I tried to photograph some of them, although the lighting was poor. We returned barely in time to change for the Bolshoi.

Moscow taxis have windshield wipers but the blades are never on them. Tonight, just as we left the hotel, it began to rain. The driver took the blades from the glove compartment and stepped out and attached them to the wipers. Yuri explained that there was, as he put it, a "little game" of stealing windshield wipers. Evidently they are in short supply. (This, we are told, is also the reason why there are no stoppers in wash bowls, though a better explanation seems to be that the Russians like to wash in running water. They have designed a marvelous faucet. It remains on only when you are operating it, but unlike the faucets in railway stations in America you can get your hand under the water while it is still running. The faucet consists of a vertical pin projecting downward. You put both hands under the faucet, lift them up against the pin, and water flows.) On the subject of stealing, we have lost all suspicion whatsoever about employees, and leave stamps, money, and objects of value carelessly about. In the cloakrooms at theaters and in the vestibules of large buildings we have not hesitated to leave Eve's fur hanging on a relatively accessible rack. There are very few policemen in evidence. In fact, I have seen none except traffic officers. This makes the matter of the windshield wipers and sink stoppers all the more unusual. We tried to tip the maid who

¹⁶ Piotr K. Anokhin (1898-1974), physiologist. He contributed to the development of the theory of functional systems as a result of his investigations on reinforcement and internal inhibition and the works of I. M. Sechenov and L. A. Ukhtomski. He was Director of the Institute of Physiology of the Russian Academy of Medical Sciences and subsequently of the I. M. Sechenov Institute of Physiology. Full Professor of Normal Physiology of the I. M. Sechenov Medical Academy of Moscow.

cleared away our breakfast dishes this morning, and she refused. Eve tried to give a young man who helped her find her way some cigarettes, but he refused also. There seems to be a genuine point of pride involved.

At the Bolshoi we saw *Swan Lake*. The theater is tremendous—completely clean and in perfect repair. The red carpets on the stairs show no sign of wear, and the plush on the rail in front of our box was fresh and clean. The whole “horseshoe” shone with gold and crimson. The box next to ours held a delegation from Burma, including three women in beautiful Burmese costumes, with Russian friends. Across from us we recognized a large group of Japanese who have a table in the dining room with us. The ballet and the audience reaction were unbelievable. We stayed for a number of ovations at the end, flowers being thrown from all the balconies and the parterre, and as we left the theater, we could still hear continuing ovations. We returned by Metro because we could not find enough cabs. This is now our standard way of returning to the hotel, and we enjoy it. In a subway which is well decorated one has no sense of being underground — wonderful for anyone with a touch of claustrophobia.

Saturday morning, May 13. Here is a good example of the choice we repeatedly face between being paranoid or dupes. Last evening, Leontiev asked if I would appear on Moscow television at six o'clock today for a few minutes, and I was happy to agree. Later last night, at dinner, our interpreter, Yuri, explained that in order to interpret my remarks on the television program he ought to have an advance copy and added that he would like to have it early this morning. My first reaction was to suspect that what I was going to say would have to be approved by a commissar and that the copy would be used by Yuri mainly for purposes of getting approval. Then I recalled that Yuri had expressed some concern about serving as my interpreter for a more technical paper which I gave yesterday at the Institute of Psychology on just the same grounds.

We are waiting to hear from Professor Luria whether we will be able to visit his Institute today. There is said to be some question of quarantine because of the flu. However, several members of our group suspect that this is just a standard excuse to cover up some other reason for not permitting us to visit the Institute. The Russians are careless about excuses. We have met a group of British educators who have been given a run-around for two or three days. They were told, for example, that they would not be able to see the ballet because it was not playing this week. They could obviously discover that this is not true. Eve and I are

beginning to wonder whether these transparent excuses are not part of some ritual which we don't quite understand, something comparable to the blatant untruths which Asiatic Indians give with no real thought to deception. It may be difficult for Luria to tell us that we cannot visit his laboratory for one reason, so he cooks up another with little effort actually to conceal the truth. If this is the case, it may very well be the basis for serious international misunderstandings. It reminds me of President Lowell's story of the French ambassador who said to one of our early presidents “*Je demande...*” only to arouse the wrath of the President, who felt that an ambassador should ask rather than demand.

Yesterday was a relatively quiet day. Two or three of us wanted to visit the Pediatric Institute which other members of our group had found interesting the day before. It turned out that there was great difficulty in arranging this because the head of the Institute could not be reached, and it appears that no one is allowed to visit independent workers in an institute without permission from the head. I decided not to join a group who were completing their survey of the Institute of Psychology. Instead the Palmers, Eve, and I visited GUM and St. Basil's at the Kremlin. A boy started to take us to a restaurant. He made the usual exchange of a pin for a coin but as we walked along he fell into the regular routine of a beggar. I am afraid that the Americans are going to spoil the children of Russia as they have of other countries of Europe. (Eve objects: it hasn't been the Americans who are responsible for this behavior.) In any case, this boy was very different from the usual Russian boys in our experience.

Incidentally, we have had to learn an entirely new set of meal times. Breakfast is usually at 8:30, but lunches are long delayed. We have gradually got used to the fact that our visits to institutes and universities will run on until three or so in the afternoon. Then we have lunch. Theaters begin early in the evening. For example, the Bolshoi starts promptly at 6:30, and one has dinner afterward. This may be a hangover from the war, as it is in England, or it may have been a standard Russian custom.

I came back to my room to rest and prepare my lecture at the Institute, which was given at seven o'clock. Two young girls from the Institute came for us in a taxi. Professor Luria served as interpreter and we again used his slide projector. The lecture was held in a fairly large classroom, and it was well filled. There were many questions afterward about relevant subjects, such as my remarks about theory and the distinction between reflex and operant behavior. Afterward, Eve and I sat and talked with Luria, Leontiev, Zaporozhetz¹⁷,

¹⁷ Aleksandr V. Zaporozhets (1905-1981), psychologist. Disciple of L. S. Vygotski. In the 30s, at the psychological school of Activity of Jarkov (Ukraine), he studied the problem of the emergence of psychological features within phylogeny, together with A. N. Leontiev. His investigations focused on the study of the cognitive and perceptive processes and on the genesis and development of voluntary movements and acts. During WWII, he worked with the wounded in movement rehabilitation. As of 1960, he was the Director of the Scientific Institute of Research in Preschool Education. He contributed to the development of Experimental Psychology, Medical Psychology, Developmental Psychology, and Pedagogic Psychology.

and two or three others, including Kostiuk¹⁸ who will be our host in Kiev. Leontiev dominated the discussion and was charming and amusing. Upon leaving, we gave Professor Luria some small presents for his wife and daughter and himself, and I told him that I planned to send him something from the United States. Hank Riecken and Ray Waggoner¹⁹ arrived in the afternoon and were present at dinner last evening after we returned from the lecture.

Friday afternoon Eve and Barbara went to Archangel, a large estate built by one of the czars for a mistress and now a museum surrounded by a very beautiful forest.

Miscellaneous item with respect to child care in Russia: This noon four of the wives went to a performance of *Don Quixote* at the Bolshoi. A father started to take his boy, three or four years old, out during intermission. The boy, bright-eyed and mischievous, resisted, and the father gave him a light cuff on the side of the head. In a sudden rage the boy struck out violently. He missed, and spat at his father with a good mouthful of juice. The father took him quickly outside. When they came back at the end of the intermission, they were on very friendly terms, and the boy sat on his father's lap and showed many signs of affection.

Saturday, 2 p.m., May 13. Ralph Tyler and I spent all morning in Luria's laboratory at the Neurosurgical Institute. It is a large hospital and there was, of course, good reason for possibly keeping outsiders away as quarantine. Luria and his assistant have devised many ingenious verbal tests for detecting the location of brain tumors. A detailed account of these will soon be published. We saw a device for recording eye-movements in which a microscope is focused on the eye, picking up a beam of infrared light, the movement being recorded by the difference in coloring at the edge of the iris. We saw a demonstration of an aphasic who had lost her English though she had worked as a translator for 15 years. She could repeat single Russian words, sometimes two words in a row, but had great difficulty in repeating three. She made interesting mistakes, confirming Luria's theory of a loss of distinction between voiced and unvoiced consonants. The Institute is a hospital of 400 beds, devoted almost exclusively to brain operations. Patients are brought in from all over the Soviet Union, and the clinical

psychologist can find almost any kind of lesion for study. Luria and a colleague described in detail the techniques of analyzing defects in verbal behavior from the point of view of brain localization of damage. Luria emphasizes the directional character of verbal behavior, meaning by this the use of verbal responses by the individual to direct and guide his own behavior.

Saturday evening, aboard the "Red Arrow." Most of the group spent much of the afternoon trying to change American express checks into rubles in order to pay our hotel bills. Fortunately I had made the exchange the day before and could spend some time resting and preparing for my television appearance. When Yuri said that he would have to study what I planned to say the first thing this morning, I got up early and wrote about 400 words, explaining the purpose of our mission and describing my own work, including a brief reference to teaching machines. I closed with an expression of our gratitude for the hospitality and friendship shown us and said that we fully reciprocated the friendship. I had this with me when Luria came to the hotel this morning. He eagerly read the material and approved it, adding that it would be well to build up the statement of friendship at the end. Ray Waggoner had brought with him a lot of small plastic trowels inscribed with the words "To cement Russian-American friendship, U. S. Behavioral Sciences Delegation, 1961." I gave one to Luria and he was delighted and suggested that it be used at the end of the television program.

Our Moscow hosts gave a reception at the hotel at five o'clock this afternoon. There was a formal speech by Leontiev welcoming us, expressing their pleasure at having us in Moscow, and effusively expressing friendship and a desire for continuing good relationships and for a peaceful world. Jim Miller responded appropriately and upon both occasions we drank a vodka toast, the Russians doing it the right way by downing the whole glass, none of the Americans being able to meet these specifications. Yuri had typed out a translation of part of my remarks and quizzed me closely about the exact meaning of several words. Whether or not a commissar had to approve my remarks, I now think Yuri was actually much concerned about his first appearance on television and wanted to be well prepared.

¹⁸ Grigori S. Kostiuk (1899-1982), psychologist and pedagogue. He worked in the fields of Psychology of Thinking, Psychology of Activity, and Psychology of Personality. He developed many theoretical and experimental works about the relations between learning, teaching, and children's psychological development. Kostiuk made important contributions to the conception of teaching material and to the History of Psychology. He was the Director of the Institute of Psychology of Ukraine and Professor at the Pedagogical Institute of Kiev.

¹⁹ Raymond W. Waggoner (1901-2000) studied Medicine at the University of Michigan. After earning his doctorate in neuropsychiatry in 1928 at the University of Pennsylvania, he returned to the University of Michigan in 1929. He was Chair of the Department of Psychiatry from 1937 to 1970. During WWII, he collaborated with the Selective Service. He also acted as advisor to the US Surgeon General on the psychological effects of US Occupation in Germany and Japan. Dr. Waggoner was President of the American Psychiatric Association (1969-1970) and received the Distinguished Service Award in 1988.

Yuri, however, never seems to be well prepared. We were supposed to arrive at the television station ten minutes after six but actually got there nearer the half hour. We were stopped at the gate by the only armed policeman I have seen, who eventually let us pass. Complete chaos followed. It appeared that the station preferred to have me read a first paragraph, then to have Yuri translate it and go on with the rest of my manuscript, leaving the last sentence for me which would then be translated in turn. This meant that Yuri had to have a completely typed version. He rushed into a room with a stenographer and started to dictate. Meanwhile, I was taken into a large studio, very much like those in America—a huge barn-like room, ceiling covered with lights, booms, and so on, television cameras being rolled back and forth on their carts, lights being turned on and moved back and forth, shaded, tilted, and so on. I was placed at a small table. Two people at another table nearby were giving a news broadcast—a running comment on sports and news events which they watched on a monitor. I kept my eye on my watch and sat and waited. At the very last minute Yuri came into the studio, hurried over, sat down beside me, handed me my copy, and the cameras swung to us and we were on. According to the manager of the studio, approximately 30 million Russians saw the program. (It was Saturday night and the program was microwaved to other cities in the Soviet Union.) When it was all over Yuri was delighted. He had been obviously worried about his first appearance and was pleased that it went off so well. I gave the small trowel I had used with my last sentence to the director. I also gave one to the script writer, a young woman who had me sign vouchers so that I could be paid. I protested that in America no one was paid for that type of appearance, but it was evidently a point of pride and they insisted that I be sent what was due me. I told them to send it to Yuri. I also gave a trowel to the general manager of the studio. He, too, was absolutely delighted. I continue to sense a real need for understanding and friendship.

Yuri and I returned to the hotel to find the reception party just breaking up. Incidentally, as in some other European cities, drivers are forbidden to use their headlights in Moscow. They use only their dim parking lights. The streets are well enough lighted and at least one avoids being blinded by oncoming headlights. It is particularly hazardous for pedestrians, however, as they can scarcely be seen. Day or night, pedestrians are in general left to their own resources and certainly run risks. (I have noticed many other dangerous practices. For example, in the Neurosurgical Institute stairways and ramps are so designed that one could easily fall and break a leg. Evidently no one is afraid of being sued, and the safety devices which are widely used in America are simply ignored. Barbara saw a rather interesting toy at the Children's World and thought of buying it for her children but did not because it had some very sharp points.)

Professor Zaporozhetz had dinner with us and insisted on taking us to the train and seeing us on to the sleeping car. Leaving our hotel we sat around waiting for Yuri, and finally drove to the station in a fleet of taxis filled with baggage and people. It was again raining and I began to see the problem of the windshield wipers more clearly. Our driver put them on for the occasion, but they were miserably inefficient, scarcely scraping the water off the glass.

At the station, Yuri made sure we were all accounted for and all our bags were in the station and then disappeared to pay off the taxis. Again we waited until we were warned by a woman attendant that we might miss our train. We all rushed down to the train ("The Red Arrow") and took over car number 9. There were a few tense moments until Jim Miller and Yuri came with the tickets, but we were soon on our way, bedded down for the night.

The train is immaculate. Our room is painted in a rather strong blue with dark woodwork. There is a syphon of seltzer water on a small table, reading lamps, and a night-light which does not go off. There is also a radio which we had trouble getting turned off.

Sunday a.m. I awoke early and am watching the countryside go by. Groups of log cabins, trim and well kept, lie in a forest of birch and evergreens. A good deal of logging is going on, and new houses are being built. Almost every house is surrounded by a yard which is almost solidly planted, although it is too early for anything to be showing. The gardens are banked up in rectangular beds with drainage channels between them. At one end of the corridor of our car there is a brazier with a charcoal fire under a sort of samovar. We have just had delicious tea and cakes in our bedroom. The tea is, of course, served in glasses with silver holders. The sleeping-car attendant is a woman and very friendly.

The countryside is now very flat, with many stands of birch mixed with occasional evergreens. The land has been carefully drained, with ditches about 10 yards apart. It seems to be planned for a second growth of timber. The houses in the villages we are passing have many television aerials, many of them on tall poles braced against the wind. We have just passed a large power installation and a transmission line. The country is perfectly flat and the railroad perfectly straight. It is said that one of the czars took a map and a ruler and drew a straight line from Leningrad to Moscow and told his engineers to build a road on that line.

The radio in our car has very good reception. A woman is talking, probably about political matters. (Actually we do not know; another case of paranoia?) The Russians seem to have an enormous supply of linen. All face towels have been of excellent quality, and the cushions in our car are covered with large sheets of natural linen heavily embroidered with brighter threads.

Sunday afternoon, May 14. "The Red Arrow" came into Leningrad exactly on time, and we were met by Professor

Lomov²⁰ and our Intourist guide. We are staying at the Hotel Europa. This morning we went in a bus with the Intourist guide around the city, which is quite beautiful, broken up by rivers and canals, reminiscent of Amsterdam, if not Venice or Stockholm. Monuments to the revolution are prominent. We are to be here only two days, and it will be difficult even to begin to see the museums. I have arranged to go to the symphony tomorrow evening where the French pianist Brailowsky is to play concertos by Chopin and Rachmaninoff. Intourist seems to be functioning very smoothly. We saw a great deal during a short period this morning. The shops in Leningrad are much more varied than in Moscow. There are more things for sale, including luxury items. The style of living is much more Western European.

Monday morning, May 15. Yesterday afternoon most of the members of our party drove about 30 kilometers by bus to the so-called Summer Palace at Peterhof. It was the opening day of the fountains. There was an enormous crowd in spite of the fact that it was threatening, cold, almost rainy. During the siege of Leningrad, the Germans damaged the property extensively and took away all the statues. A few of the original have been recovered, others have all been duplicated. All have shining coats of gold leaf. There are 137 fountains, some of them ingeniously amusing for children, others on the scale of Versailles. The property is on the Bay of Finland and there is a naval station nearby. Many sailors were among those walking on the grounds. This is *pour épater la bourgeoisie* with a vengeance, and another example of the value placed by the Soviets on former upper-class standards of the beautiful and garish. I was most interested in the behavior of the people.

The streets of Leningrad are also as full of people as were those of Moscow on the preceding Sunday. Although evidence continues to mount that the Soviet economic system is effective, I begin to sense an extraordinary sameness in the lives of its citizens. They appear happy and circulate amiably, but this is hardly the be-all-and-end-all of living. I am beginning to wonder just what Soviet citizens live for. Evidently they are willing to accept old Western European standards of the good life—doing nothing for a certain number of hours per week and wandering around with friends among ancient monuments and pleasant parks. (Eve raises the question of what one can expect people to do in large numbers, and number seems to be the word. Any attempt to plan for people on this scale makes

one realize the seriousness of the population explosion. Maximizing the number of happy people is not far from the old religious principle of filling heaven with as many souls as possible.) Incidentally, when Eve asked the Intourist guide about the antireligious museum, he corrected her, saying it is not anti-religious but “religious from an atheistic point of view.” It is actually called “The Museum of Religion and Atheism.”

In the lobby of our hotel yesterday afternoon when I was ordering theater tickets, another tourist heard my name and introduced himself. He teaches at the University of California and uses *Walden Two* in a course on utopias. He is here with a large party, and they were on their way to a wedding hall, which we will not have time to see. If you wish to be married with a good deal of ceremony, you may have a wedding in this building. It is non-religious but full of ritual and is an alternative to a quiet visit to a justice of the peace. If you don't have much money, you can join in a mass marriage. (Compare the American custom of bringing your daughter out in a group rather than in a separate coming-out party.) Eve asked Yuri about practices associated with death and burial. You may be cremated or buried. If you are religious, you may have a religious ceremony, but in general nothing at all is done. When Eve asked if they had memorial services, Yuri was rather puzzled and had to have this explained to him, and then said that in some cases a few friends might call and have refreshments.

At the Summer Palace we saw a beautiful baby lying in a little go-cart. On closer examination, we saw that it was attached to a cradleboard. Only its face was visible. In general, all the young children we have seen are swaddled. The slightly older children have on knitted helmets or stocking caps, even in warm spring weather. I would guess that the age at which they are released from this is four or five years.

5:30 p.m. Monday, May 15. This morning, after having exhausted all our available post-cards waiting for Yuri, and without success, Frank Palmer and I set out to see the Hermitage. We had an appointment at one o'clock at the Pavlov Institute where we would rejoin some members of our group. It turned out that we should have waited for Yuri, because he had gone to a great deal of trouble to make arrangements for us to visit a school. The Hermitage contains a thousand rooms and tens of thousands of pictures, many of them wonderful. There is a room with a dozen

²⁰ Boris F. Lomov (1927-1989), psychologist. Specialized in Engineering Psychology. He worked on theoretical and methodological aspects of Experimental Psychology, carrying out research in Engineering Psychology (aviation, cosmic and otherwise) and Psychology of Cognitive Processes. In 1959, he founded the first Engineering Psychology center in the U. S. S. R. Together with B. G. Ananiev, he founded the Psychology Faculty of the State University of Leningrad. He worked in the Pedagogic Institute in Leningrad and in the Psychology Institute in Moscow. Chief Editor of the journal *Psikhologicheski zhurnal* (Psychological Journal). Between 1968-1983 he directed the Psychologists' Association of the U. S. S. R.

Rembrandts, another with magnificent Rubens's, and so on. I could not find the collection of French impressionists and after looking for it had trouble finding the exit. The collection is on the third floor, as I found later, in unattractive rooms and scarcely visited by Russians at all. Frank and I had a short snack and then tried to get a taxi. When none were available, we tried the buses, got wrong directions, and crossed the Neva ending up in a district where we were able to communicate with no one. Eventually we got back and, by luck, in walking along the Neva in what we hoped was the right direction, we spotted Yuri who had been waiting 40 minutes for us.

Our group was already inside seated around a table with coffee and cakes. Chernigovski²¹, Koltzova²², and others were there. We saw the chair Pavlov sat in, the hole in the door he peeked through to observe the movements of his dogs, and a classical Pavlovian experiment, amplified now with photographic recording of electrocardiographs, pneumatic responses, and so on, with the possibility of implanted electrodes. Everyone worships Pavlov, and Koltzova frequently began her answer to a question by saying "You see, Ivan Petrovich Pavlov said..." This seemed to justify the procedures or ideas they were following.

We returned to the hotel at four, and I went looking for the Museum of Religion. I walked a long way in the wrong direction and then stopped a young man and asked directions. He spoke a little English, which he had learned at school. He was a young production engineer with a day off. He insisted upon walking six or eight blocks to the Museum, taking me through it and, with the help of my dictionary, translating the principal points. There are displays comparing the religious and scientific accounts of evolution, of the stars, and so on. There are displays of the vestments and equipment used for the mass in Roman and Orthodox churches, many pictures and sculptures representing the history of religion, in particular religious persecution. In the basement there is a wax-museum exhibit of a torture chamber in the Spanish Inquisition, and many actual instruments of torture, including three masks which were clamped over the faces of the victims, in the long metal snouts of which savory food would be placed so that the victim would smell it as he starved. There was a ceramic statue showing the

pope with his hand in a gesture of blessing, and from the long purple robe which stretched behind him were peeking out Mussolini, Hitler, and Hirohito.

At six o'clock I shall pick up tickets for the circus and the symphony for various members of our party, have an early supper, and go to the symphony. Yesterday at the end of our visit to the Summer Palace I had a rather depressing feeling that the Russian people had solved their problems only to find themselves very close to universal boredom. In reconsidering this, it appears to me that we have been looking at just those people who are bored or who seek for rather cheap entertainment in public parks and so on. After all, the Russians have stimulated literacy, there are book stores everywhere, and stalls and tables of books in the streets are usually surrounded by crowds. Somewhere in the city there must be hundreds of thousands of people reading, to better themselves and for enjoyment. The visual arts are languishing, but music flourishes, as does the ballet. Perhaps it is too early to decide whether communism can solve the problem of a full utilization of human potential. (They ought to solve the problem of the Hermitage by putting a reasonable number of their more valuable works in a set of rooms through which the public could move conveniently, leaving the second-raters and specialties for scholars in other quarters. It is simply too vast a museum to permit any reasonable coverage in a day or so.)

Leningrad is even more cosmopolitan than Moscow. In our hotel the newsstand sells papers and magazines in Polish, Hungarian, Chinese, French, German, English, and many other languages.

Ten o'clock, Monday evening, May 15, just back from the symphony. Brailowsky played the Chopin *E Minor* and the Rachmaninoff *C Minor*. I sat for the first half in the eighth row and was amazed at the poor quality of the orchestra and puzzled by the voicing of the piano. Then, in what I thought was a friendly gesture, I changed places with Mary Tyler and stood for the second half six deep in the first floor balcony. It turned out that my earlier seat had been in a "dead" acoustic spot. From the balcony, the orchestra was magnificent, as was the piano. It is apparently something of a novelty to hear Chopin again after he was banned during the Stalinist regime. The latter half was completely Russian, Rachmaninoff being played by a Russian pianist in the Leningrad Symphony Hall, and was

²¹ Vladimir N. Chernigovski (1907-1981), physiologist. Disciple of K. M. Bykov. He carried out investigations in physiology of interoception, its functional organization and structure, and its cerebral representation. In his works, he developed the theory of cortical-visceral interaction. He studied the physiological mechanisms of reflexes at brain level using the evoked potentials method. One of the founders of cosmic physiology, he participated in sending the first dogs into space.

²² Marionilla M. Koltsova (1915), doctor, physiologist, and psychologist. Author of the memories of the siege of Leningrad during WWII with examples of medical and psychological assistance to children in extreme conditions. She was the Director of the Laboratory of Nervous Activity in Preschool Children (1969-1987). She has carried out investigations of the interhemispheric relations of the cerebral cortex, of the mechanisms of language genesis in children, and of the inter-relation of fine motricity and the functions of children's speech and drawings.

quite thrilling. (The program called Brailowsky “French.” A woman sitting beside me insisted he was Russian. I suspect he is Polish.) It would be unusual in the United States for a program to be composed of two piano concertos and very unusual, as was the case tonight, for the pianist to come back and play several encores solo.

On the way into the hall, I was approached three times by young girls. They did not seem to be students, and I wondered whether they might not be prostitutes. I came out of the building alone to see whether they would still be there, but they were not. I decided that they had approached me in some sort of effort to cadge the price of admission to the concert. The hall was filled, and there must have been half as many standing as seated. Most of the audience were young, enthusiastic, well dressed—a very different crowd from that at the Summer Palace yesterday, and one which restores my faith in the new Russia.

Eve spent the evening at the circus. It was a small, intimate, European type of circus, the most exciting event being a woman tiger trainer who worked with eight tigers using only a small whip. She would frequently hug and kiss them and arrange their position by pulling their tails.

(Miscellaneous item: Eve has noted that as she walks along the street women look first at her face and then immediately down at her shoes. Other members of the party have noticed this, also. Shoes and stockings may be a way of identifying Americans.)

Tuesday morning, May 16. Several of us visited the Bekhterev Institute. This is a hospital for the disturbed or insane with a small amount of experimental work going on. We were received, as always, by the director²³ and given a long account of the many fields covered by their research. During a discussion of clinical matters with some members of the group, Don Marquis and I asked to see some experiments. We were taken to the office of the subdirector who led us into his office, sat us down, and again explained the various kinds of things they did. When we asked again to see apparatus, we were shown a single piece, concerned with verbal conditioning. It was a vertical panel containing a circular translucent disc near the top on which figures, colors, and so on, could be projected. The subject responded apparently verbally, but also by pushing on a treadle or lever consisting of a block of wood which squeezed a rubber

balloon or bulb. The force of the press was measured on a meter behind the panel. Various auditory stimuli could be presented in different intensities, and reaction time appeared to be measured. At one side was a small chute through which candies could be delivered, but the director said that this was not used with adults. The whole thing could be folded up and carried about.

We also saw a room containing six beds and wall sockets from which electrodes could be led to the heads of patients, one on the forehead and one at the occiput. An alternating current, up to 30 volts but usually 5 or 10 volts, was sent through the head. This gave “a tickling sensation” and put the patients to sleep. They were allowed to sleep for two or three hours in what appeared to be a form of narcotherapy.

I found a chance to get back to the hotel before the rest of the group left the Bekhterev Institute and had lunch and a brief rest before lecturing at the Pavlov Institute. Jim Miller spoke first for about an hour and I followed for about an hour. The Institute lecture hall was jammed, with people in the doors and sitting on extra chairs in the aisles. There was great interest and many expressions of unhappiness that we were not going to be around longer so that many points could be discussed. We also expressed unhappiness over our hurried departure.

After our lecture Professor Lomov of the University of Leningrad asked if we would sit down and talk and suggested either that we remain at the Institute or walk a short distance to the University. We chose to go to the University, and this was a great mistake for we fell into the hands of the woman who holds the chair in psychology at the University, Yarmolenko²⁴. She badly needs glasses and squints at you in one way and at a text in her hands in another way. She speaks English mechanically and did not understand our questions. Lomov was evidently too far down the totem pole to dare to interrupt. When Yarmolenko finally graciously let him talk, she busied herself with papers and other accounts on her desk as he did so. She went through the usual long description of the many kinds of psychology taught at the University, she herself being interested in experimental, clinical, social, and a few other fields. Don Marquis sitting next to me wrote a note to Jim Miller as follows: “If you want to get out, you can say I have to be back at the hotel by six o’clock.” But Jim

²³ Boris A. Lebedev (1925-1992), psychiatrist. Director of the Bekhterev Scientific Institute of Psychoneurological Research between 1961 and 1964. He worked in Geriatric Psychiatry, Somatopsychiatry and he postulated the scientific bases of the organization of psychiatric intervention. In 1964, he represented Soviet psychiatry in the section of Mental Health of the W.H.O., in 1967 he was elected Director of that section. Full professor of Psychiatry of the Nr. 1 I. P. Pavlov Medical Institute of Leningrad. Honorary Member of the APA and of the Belgian Psychiatric Association.

²⁴ Avgusta V. Yarmolenko (1900-1976), pathopsychologist and defectologist. Assistant to the Director of the Institute of Audition and Speech in Leningrad. She worked in a war hospital during the siege of Leningrad in WWII. Teacher of the Psychology Department of the Faculty of Philosophy of the State University of Leningrad, and later on, teacher of the Psychology Faculty. She worked with B. G. Ananiev and B. F. Lomov. She contributed to the development of psychology of persons with special needs in the U. S. S. R. (deaf-mutes, etc.) by studying their psychological development and biological and social compensation mechanisms.

remained polite to the end, giving Yarmolenko plenty of time to explain all she was doing. She then asked whether there were any questions. We explained that we had to be back at the hotel by six, it being quarter to six at that point. She pointed out that that gave us 15 more minutes to ask general questions. But I stood up and held out my hand to say goodbye. She squinted at me viciously, and said "But you have not asked any general questions." We made our escape, carrying with us copies of a book recently published by several people but autographed by only one of its authors, Yarmolenko.

Wednesday, May 17. It now turns out that we shall be in Leningrad all day today, going to Moscow tonight, and Tashkent during the night. We have decided not to renew professional contacts but simply to spend the day enjoying the Hermitage and other things in Leningrad. Last evening, we joined the Palmers in entertaining Koltsova and her husband at dinner at the Oriental Restaurant, a good restaurant pleasantly decorated. Koltsova is a very interesting person but her work is not too exciting. She was in Leningrad during the siege of 900 days, taking care of wounded and disturbed children, and is till very bitter towards the Germans.

In a special room off the dining room at the Europe there is a delegation of about 35 Vietnamese, with 2 or 3 Russian guides. This morning at breakfast most of the Vietnamese had arrived, and when a large and impressive Russian appeared, they applauded him. He took his place in a central seat and sat down. Is this sort of thing happening in the United States today?

Thursday, May 18, Tashkent. Yesterday afternoon Bob Merton and I went back to the Hermitage to see the French impressionists and managed to get back to the hotel for lunch as agreed at about three o'clock. Service was very slow and we had difficulty in getting to our room before 4:30 in order to pack for a 5 o'clock departure. We left nearly on time, however, and reached the airport quickly. We flew to Moscow on a Soviet Aeroflot jet. The plane carries more than a hundred persons with only two jet engines. The engines are close to the fuselage, and the landing gear is farther out on the wings in separate nacelles. The wings droop somewhat, so that the tips are only about six feet above the ground when the plane is on the ground. The speed at takeoff seemed very high and the plane buffeted a good deal, indicating that it was either faster or lighter, or both, than our American jets. In general, it was very comfortable, with reclining seats which permitted one to sleep easily.

We reached Moscow at 8:20 and spent a pleasant evening in the airport. The room reserved for intourists was very comfortable and convenient. We broke up into groups and played cards, poker, bridge, and so on, some of the members having a long dinner in the airport restaurant. At about two o'clock we left for Tashkent where we arrived at nine o'clock this morning. As we had been

warned, the Intourist guide at Tashkent takes his job very seriously. We had breakfast and then were taken on a long tour of the city. We visited memorials of Soviet heroes, a considerable number of statues of Stalin, and made a very interesting tour of areas where new apartment buildings are being put up, the old adobe huts of the native quarters being bulldozed to the ground. We saw a new technique of building apartment houses with large panels of preformed concrete, a single panel being the size of one unit of an apartment.

Tashkent is Asian and there are many old-style costumes. At the moment this is particularly true because a group of women from some other province are visiting the city for a convention. There is a remarkable difference between the ages. If the young people we have seen are really the children of the old, then the Soviet system has done a remarkable job of converting a population in one generation. Many groups of young people can scarcely be distinguished from European or American children. The school children are dressed in the same uniforms as in Moscow and again seem very friendly, happy, and energetic. They do not seem to have picked up the practice of changing pins for gum, pencils, and so on.

The hotel was built only three years ago and evidently by inexperienced people. The washbowl in our room is coming off the wall, the toilet seat is cracked, there is no hot water, parquet floors are badly polished, and so on.

The large parks in the city are in good condition, though in the climate here they cannot be as well cared for and as lush as in the Northern cities. In general, the flowers in Russian parks are beautifully cared for and watered by special trucks which make the rounds each day, but the grass is never cut and to Western eyes looks shaggy and unkempt. We learn that Russians find our custom of mowing lawns comic—they believe that grass, like flowers, should grow naturally. At Tashkent several artificial lakes, on which many people were rowing boats, are surrounded by colorful gardens. The airport at which we arrived contained the usual bed of flowers, this time with large rose bushes, past their prime. The soil is clay and dusty, and the dust blows from unirrigated areas, but with a system of irrigation canals along every street, it is possible to grow shade trees in great number and size, adding greatly to comfort in a hot climate.

Uzbek has been converted from nomadic agriculture to efficient industrialized farming and manufacture in about a generation. The result is certainly less picturesque. The *National Geographic* would find much less to photograph for its readers. But I have begun to believe that maintaining a sort of zoo of interesting primitive people is a particularly cruel form of exploitation. Eve regrets the loss of individuality and hates to think of a world which looks the same everywhere.

We had dinner on the roof of the hotel. Shish-kebab and red wine, with champagne, courtesy of Jim Miller and

Yuri, a five-piece dance band—two accordions, a cornet, a violin and drums—in the distance fireworks, in the square opposite the hotel colored lights, and, occasionally, a whiff of WC from one of the ventilators. The large crowd in the restaurant was obviously interested in *les américains*. Hank Riecken arrived with two Uzbeks, one an engineer concerned with the automation of railroad control who spoke very good English and the other a construction engineer who spoke German. They stayed with us for the evening and had champagne. Bob Merton moved to another table and was soon lost in energetic conversation with a group of young Uzbeks.

The schools in Uzbek are divided according to the third language taught. They all teach Russian and Uzbek; in addition one will teach English, another Hindustani, another Chinese, and so on. This means that thousands of Russians are being prepared to establish relations with all neighboring countries.

Sunday morning, May 21, after arrival in our hotel in Tbilisi. We left Tashkent on the evening of May 19 to go to Samarkand with light baggage, and returned the evening of May 20. We have not had access to our stored baggage until arriving here, and the Dictet was inaccessible. Before picking up the thread of events I will comment on the terribly inefficient Intourist service in Uzbek and Georgia. Intourist in Tashkent knew we were planning to return last evening from Samarkand and must have known the actual plane time. Yet, upon our arrival no provisions had been made, and for some of our party no rooms were available. In order to make a room available for Ray Waggoner, a group of six were thrown out of it, and it was two o'clock before Ray was able to take over. One result of this is that without wishing to do so, we find ourselves ousting Russians from their own quarters. Something should be done about this for the sake of public relations. For example, after returning to Tashkent last evening, we went to the restaurant on the roof of our hotel. It was a fairly large crowd, but two tables were left for Intourist. At one of these sat a stocky man, evidently an Uzbekian, with shaved head. How long he had been sitting there I do not know, but the management immediately approached him and told him to get out. Fortunately the rest of us found enough places at the other table so that we were not actually dispossessing him, but the management continued to work on him, three or four people standing around him at a time. They pointed to the sign saying "Reserved for Intourist" but he answered them stubbornly, gesturing to indicate that there was no other place for him to sit. He looked ferociously in our direction several times and I took an opportunity to gesture to him to stay where he was. I believed he sensed that we were sympathetic. In any case, the hotel officials eventually left him alone. He stayed for only 5 or 10 minutes, just enough to establish his right of possession, then got up and left. As he passed our table I got up, held

out my hand, and he shook hands cordially. In this case I think he must have known that it was not the Americans who were trying to displace him, but this is not always made clear.

Our arrival here in Tbilisi was also not foreseen by Intourist, and there was a good deal of trouble in getting rooms. Evidently, they have been forced to give us deluxe quarters. Eve and I have a large suite. A corner room with three balcony windows contains a desk, a divan, and an upright piano, with the usual table for service in the middle of the room. The bedroom is equally large and luxurious. The bathroom is larger than usual, marble walled, and as usual the toilet runs constantly.

On our day in Tashkent, May 19, we visited a boarding school and later a teacher's college. The boarding school was in what was formerly a military school for boys. We were told that these were being abandoned in Russia, and the building had been made available for a school for boys and girls. It was a holiday (the 30th anniversary of the founding of the Young Pioneers), but there were many children on the grounds. We were greeted by perhaps half a dozen boys with 35 mm cameras who photographed us more energetically than we them. We later learned that they were part of a "Camera Circle" (we would call it a camera club) and were out taking pictures as part of their activities. The grounds of the school had been made gay with streamers of small colored pennants. We were taken as usual to the director's office where we received an explanation of the function of the school. Evidently, the Soviets face an extensive engineering job in Uzbek and are finding it much more convenient to get the children away from their families for considerable periods of time. The children were again fascinating. They all showed the same alert bright curiosity and high levels of performance. Although school was not in session, we were able to visit an "English Circle". It was meeting in a room reserved for language teaching, containing a large tape recorder in a small room at one side. I was asked to record a few remarks in English so that the class could study them the next day. To demonstrate how they taught English, children in pairs acted out small skits. For example, a girl playing the part of a cat would try to induce a small boy playing the part of a mouse to come into her house. The skit ended when the mouse pointed out that the cat was trying to eat him and ran away. The children all applauded, and we joined in. Another skit was just barely intelligible to our ears but was enjoyed heartily by the children. They appreciated our applause. When I suggested to the teacher that English songs would be useful, she said that no one there knew any, and I offered to have our daughters record some songs and send them to them. This idea was received very warmly, and when we later returned to the director's office and my offer was translated to the director and perhaps a dozen teachers sitting around the edges of the office, they all responded with great enthusiasm and

exclamations of pleasure. It is very difficult to maintain our paranoid stand under such circumstances. I cannot believe that the extreme cordiality and interest shown at that school was put on in an effort to pull the wool over our eyes. These were obviously highly intelligent, pleasant young teachers who were working with three or four hundred Uzbekian children with great enthusiasm, and they welcomed our gestures of friendship and our expressions of hope for peace. Before we left, several children paraded in carrying large bouquets—magnificent roses from the children's own gardens. As we left, the boys with cameras were again at work, and we photographed them and other members of the school.

The visit to the teacher's college was disappointing. The college had several thousand students and throughout the Republic of Uzbek something more than a thousand teachers are turned out by such colleges every year. According to Ralph Tyler this compares favorably with the production of teachers in California which has essentially the same population. The curriculum emphasizes character building as well as instruction in fields of knowledge and industrial skills. We asked to see the psychological laboratories which had been mentioned and found a perfect jewel of a "brass instrument" museum, where Professor Ivanov had set up a laboratory course. There was an ergograph, a hand dynamometer, a memory drum, a reaction time apparatus with a Hipp chronoscope, and so on, all in mint condition. In one corner at the back of the room a man who appeared to be a technician was looking rather dubiously at a soldering iron and other tools near him. It looked like window dressing. I doubt whether the equipment we saw has had any attention for years or requires any. There was no sign of any research.

That afternoon in Tashkent a young man approached Jessie Miller and Eve in the lobby of the hotel. He was 21 years old and his mother taught in a local school. He spoke excellent English with a large and adaptable vocabulary. He was studying languages, spoke French as well as English and planned to study Oriental languages as a specialization. He offered to meet Eve the following morning and take her through the city. He said he preferred to meet her outside rather than in the hotel because the local people frowned on Russians entering this hotel. The next morning he was outside the hotel before Eve arrived and approached Barbara, asking her if she were Eve Skinner's friend.

Before Eve arrived, Yuri took him aside and talked to him at length, evidently cautioning him against further contact with the girls. He had brought presents in the form of three books in English. He took Eve, Barbara, and Peggy by streetcar to the old bazaar and then to a main shopping district where he helped them shop. He told them about conditions with the greatest freedom. When they asked whether they could use their cameras, he said "Of course." Later, when they were looking at a wretched part of the old

city he encouraged them to take pictures, saying that it would give them a good idea of old conditions. He had listened to my television appearance. He spoke freely about relations between the Uzbekians and the Russians, claiming that the latter look down on the Uzbekians and regard them as easily led and stupid. He explained that the Uzbekians make petty violations of rules quite freely because the police are also Uzbekians. For example old men sit in the bazaars selling trays of cheeses and eggs which they themselves have produced. This is illegal, but the policemen walk by and do nothing about it. (I saw my second Russian beggar in Tashkent, sitting against a wall holding out a hand with a few coins in it.)

The young Russian was much interested in the United States and asked many questions. He was the first person to ask Eve about the American attitude toward the Negro, and he asked whether we ourselves had ever seen evidence of the Ku Klux Klan. When Eve said that neither she nor anyone she knew had ever had any contact with it, he said that he was not surprised and had suspected that it was an exaggeration or invention. This was not quite a fair conclusion, because there is little doubt of the reality of the Klan. Eve explained that we were Northern liberals and so were our friends, and not all Americans shared the attitudes toward the Negro found in the South. He accepted this and said that he was sure the reports had been exaggerated. At one point, he bought Eve a forest-berry drink which was delicious but probably not too safe to drink. He had made friends a year ago with an American student from Berkeley who had been in Tashkent. They have corresponded since. He wanted to send the sister of his friend a present of some silk, and asked Eve whether she could put it in her baggage. It would not weigh much. He explained that it takes about a day to go through the red tape to mail anything to the United States except books and phonograph records. He offered to send Eve records she was not able to buy and said that she could repay this by sending him American jazz records. We were leaving Tashkent for Samarkand that evening and Eve made arrangements to have him come to the hotel upon our return and give her the silk. When they got back to the hotel, however, and were trying to make arrangements to have the silk left at Intourist, Yuri refused to let him talk to the Intourist bureau, took him by the arm, marched him out of the hotel, and gave him a long lecture. We arrived back from Samarkand an hour later than we planned on the following day, and the young man was not waiting for us. The three girls took turns watching for him outside, but he never turned up. Barbara checked with the service bureau for any packages left for us. There were none.

We left Tashkent in the evening in a very old plane (the pilot waited on the airstrip for a favorable wind to take off in) and landed on an unpaved airfield in Samarkand. We

drove in a very small bus over the roughest roads we have yet experienced to our hotel, the Samarkand. It was primitive but not as bad as we had feared. Our room was small, full of flies, with two beds made of iron frames and chain springs which sagged like hammocks. The bathroom was filthy and the plumbing in bad repair. We shared a dirty shower with the next room, with the usual interlocking doors. The toilet paper was newsprint. A dish of fly poison lay on the desk. There was a small service table but we were not tempted to have breakfast in such a room. One member of our party was bothered with bed bugs. We dined in a noisy, dirty, unpleasant dining room on bad food, listening helplessly to a very bad orchestra. We ordered 10 bottles of beer which were opened before we discovered it was undrinkable, but we converted catastrophe into philanthropy by taking all 10 bottles over to the orchestra, thus contributing further to their delinquency.

The extraordinary symphony concert in Leningrad and the obvious interest of young people in good music must be evaluated against the perfectly horrible restaurant music we have encountered. Of course we have been in Intourist hotels, and the Russians may be under the impression that this is what Americans want, but the invariable rule is a rather large orchestra playing *fortissimo* throughout the evening. Conversation is impossible. There are usually two or three large piano-accordions, often a trumpet, always a set of drums, and here in Samarkand a singer with benefit of a microphone and powerful amplifier. They usually play American music, often scarcely recognizable as such, or some of their own music in the same genre. As Eve puts it, they have no conception of "background" music.

The next morning we readily forgave all the inconveniences of the hotel because the tour was unbelievably beautiful. Samarkand, the seat of Tamerlane, still contains many beautiful mausoleums and mosques. We visited first an observatory built by a liberal ruler, a grandson, I believe, of Tamerlane, who became interested in astronomy. A building 35 feet high had a small hole in the roof through which a ray of sunlight passed to strike a large arc of marble in the lower part of the building. The building was soon destroyed (the ruler was "too" liberal) but the arc has been excavated, and we were able to walk clown along it. The marble was grooved to take metal runners on which a cart moved. Zodiacal markings were cut in the marble. With this equipment the astronomer was able to calculate the length of the year with remarkable accuracy.

We visited a series of mausoleums along a beautiful ancient street which rises up a hill, built by various rulers for victorious generals, favorite nieces, and so on. The buildings are mostly in blue tiles of differing hues with ceramic pillars. Inside each, a beehive construction of small niches is very delicate and pleasant. Some of these

mausoleums are under reconstruction. The government is carefully restoring the glory of Tamerlane's period as part of its program to preserve and recreate the past, and evidently takes the same attitude toward the Moslem religion as toward czarist Russia, scrupulously restoring its glories in spite of the fact that it has almost completely eliminated the religion itself. We visited one of the two practicing mosques, a building in poor repair, in front of which was a small minaret, still used to call prayers, and a pond perhaps fifty feet in diameter filled with muddy water. While we were there, two children came and filled pails and an incongruous teapot with dirty water from the pond—to be used, I suppose, for household purposes. A very old Moslem was saying his prayers on a stone when we went into the court, and inside the mosque another was reading the Koran. A third arrived for some official purpose. We were told that on Fridays about a hundred people come for service and if this is true of the other mosque, it means about 200 practicing Moslems in a city of 200,000. Two other Moslems sitting on the ground were playing some kind of game.

The largest structures in Samarkand are a set of Moslem monasteries built in a very lavish style with high minarets. The minarets are slightly warped and threatening to fall. The government has restored one to the vertical by pulling it back into place, then lifting it and putting a new foundation under it. (It weighed 800 ton.) A second is now guyed up by steel cables which are tightened once a month. Eventually a new foundation will be put under it. We saw tiles being made of local clay (fired, glazed, and refired) for reconstruction purposes. We also saw many workmen resurfacing the buildings. No effort seems to be made to distinguish original from restoration, the whole point being to restore the glory of the early Moslem empire as a national monument.

I started to take a photograph of a group of children. They all ran away except for one girl. I then asked Eve to take my picture standing with the girl. As soon as the others saw what was up, they all came dashing back and lined up.

We also visited the remains of a great mosque built by Tamerlane. Little is now standing except one tall arch, which shows the effects of the earthquake which reduced the building to ruin and of further weathering. The tile face on one side of the arch is curving away from the surface and parts of it frequently fall. Two weeks before a large part had come down, and we were permitted to carry away some of the tiles. We would have been permitted to take some carved stone tilings with beautiful designs on them, but they seemed too heavy to carry in our baggage and shipping would have meant problems.

During part of the night several Moslems outside our window kept me awake with a long conversation, and I was awakened at precisely six in the morning by a marching troop of Soviet soldiers singing a beautiful, very Russian

marching song. This is a border city, of course, and has a garrison of soldiers. As the group marched by, it had, as Frank Palmer later pointed out, the typical appearance of any early morning squad out for drill. It began with a sergeant marching very smartly, and a few soldiers in step, and ended with others scarcely awake, stumbling along with no thought of keeping step at all.

There are parks and the usual statues and fountains in Samarkand, and they are heavily populated. At a very good store we bought gifts, including a small gold-plated, blue enameled silver vodka cup, some silver spoons, and some small gold forks. At a native bazaar I was hesitating as to whether to buy a beautiful white silk shirt which would have cost about \$12. I decided against spending the money but later discovered that our Intourist guide had bought it for himself. There is a great mark-up of the ruble when purchased with dollars, but this is rationalized in the following way. The government manipulates prices for its own purposes. Essentials are cheap; living quarters cost not more than one tenth of one's income, plain foods, plain clothing, and transportation are cheap—all essentially subsidized by the government. If foreigners coming to Russia were permitted to exchange dollars for rubles on even terms, they would be able to take advantage of the subsidizing of basic services. The only solution is to lower the value of the currency to outsiders with an unfavorable rate of exchange. Where we paid a nickel for a ride in the subway the Russians were paying only something of the order of two cents. Luxury clothing, luxury foods, antiques, and things like automobiles are, of course, out of reach of the average Russian, and are relatively even more expensive in exchange for dollars and not worth buying. Yet some of these are the things we should like to bring back as gifts. (The problem is very similar to that faced by state universities in the United States a generation ago, when out-of-staters were enjoying the advantages of a subsidized college education.)

Monday morning, May 22, in Tbilisi. Until last night I had assumed that all Russian toilets naturally leaked. I could imagine several million rubber bulbs going out from a central factory, all of them defective. Our toilet developed another defect, however; the bulb closing the valve reached an unstable equilibrium, setting up a powerful vibration which shook the building. I opened the toilet to remedy this and discovered that the porcelain overflow channel along one side of the reservoir had been chipped away with a pair of pliers to allow the water to run constantly after filling. I shall examine the remaining toilets I see in the Soviet Union. Evidently there is a fetish concerned with running water. The amount of water running away through one toilet per annum because of such a leak must be enormous. Multiply this by all the toilets in a city in a dry area and one can see the price Russia is willing to pay for this fetish. In the lavatory on

one airplane we flew in a washbowl was dispensed with altogether in favor of a very shallow drain. One stepped on a pedal to cause cold water to flow and washed one's hands under it with no water accumulating below. Our bathroom is a fine example of the contrast between ancient luxury and current neglect. The walls are covered to a height of six feet by marble slabs, each an inch thick. The tub, rather high, is built up around the exposed side with marble blocks or bricks, at least three inches thick. Yet, the marble has been punctured appropriately to let pipes through and badly patched with plaster, and the tile floor is uneven and crudely edged with cement.

One characteristic of Tbilisi which makes it more Western even than Moscow and Leningrad is the way people passing in the streets look at you. In Moscow and Leningrad and elsewhere in the Soviet Union they look at your face and then quickly down at your feet. The men avoid looking at women entirely in Moscow and Leningrad, as do women looking at men. In Tbilisi, however, they stare at you in Western European style.

Last night I battled the elements. Our rooms have five large French windows facing on the square. These have been painted and repainted until the handles and latches do not work. A heavy storm came up, the full force of the wind striking these windows. Two of them kept blowing open, and there was no way to latch them closed. I wedged toweling under them, propped chairs against them, but they repeatedly blew open. At the restaurant on the top of a hill (reached by funicular by Eve last night) the same storm blew windows open and shattered the glass. It may have been an exceptional storm but I wonder what is done with these windows during the winter.

The price of vodka in Samarkand was very high, being nearly \$5 for an ordinary bottle. Here in Tbilisi it is about \$2.75 and, as I remember, was as low as \$1.50 in Leningrad. This may reflect the Moslem prejudice against heavy drinking in Samarkand, or it may be some kind of economic manipulation of drinking habits where alcoholism is a problem. Otherwise, prices seem to be standard.

Yesterday at lunch in Tbilisi Yuri ordered several bottles of champagne, and when all our glasses were filled, he announced that Kennedy is to meet Khrushchev in Vienna early in June and proposed a toast to the hope that many good things might come from this meeting. We all rose and drank a toast in the Russian manner.

In general, Yuri continues to bump Russians out of place for the sake of his Americans. We don't like this but find it difficult to do anything about it. Last night, waiting to take the funicular down from the restaurant, there had been two couples waiting ahead of our group. One man had stepped aside for a moment and when he came back Yuri refused to let him take his place. Barbara and Eve motioned to him, and he dropped in with them when Yuri was not present. This is a potential source of ill will, but

the Russian people themselves seem to play the game. When they recognize tourists, they are extremely anxious to make them happy. For example, yesterday we visited a large children's park where there is a steam train run entirely by children (the engineer was a young girl). Some of our people got on, and mothers and children insisted upon giving seats to them in spite of protests.

Russians have a limited sense of humor. Irony is completely beyond them, and it is easy to hurt their feelings with what are intended as burlesques of anti-Russian propaganda. Eve was commenting to Barbara about travel habits and said she had brought with her only simple cottons which even "primitive Russians" could not hurt. Yuri heard her but obviously missed the point that this was a paraphrase of something we had heard but didn't accept.

Personally I find Tbilisi a very ugly city. It reminds me of the factory and mining towns of Pennsylvania. The hills rise in back of the grimy buildings, black smoke pours from chimneys, and the architecture is completely undistinguished. However, the rest of the party thinks it is beautiful.

Miscellaneous item: Upon arrival at Tbilisi, we went to the usual Intourist rooms at the airport. While waiting, we were approached by three young women who asked if we were Americans and then asked if we knew anyone in Detroit. It turned out that the husband of one of them was working in Detroit, but we could not get details about his job. He was planning to come back in six months and live in Tbilisi. They first asked whether we were Armenians, by the way.

Incidental item: My theory of the chipped toilet is than an agricultural and nomadic people would have regarded stagnant water as dangerous. Anatol Rapoport has another theory. It seems that a distinguished scientist who came from an upper-class Hungarian family caused no end of trouble when he lived at a certain faculty club because he absolutely refused to flush a toilet, claiming that this was servants's work. The new theory is that after the revolution people who were accustomed to toilets continued not to flush them, the maids became outraged by the odor, and jimmied the toilets so that they were always slightly flushing.

We made a tour of an early Christian church and monastery some distance from the city, both quite beautiful. The church contained a small church built in the fourth century. (Georgia was the first country to adopt Christianity officially.) The larger building contained icons before which lamps were burning, the church—though a "museum"—still being in use in the Georgian Orthodox service. The church contains the famous but fairly recent painting of Christ which gives an illusion of the eyes opening and closing. The monastery was built to surround a rude cross erected by early Christians.

Back at the hotel we had an elaborate birthday party for Anatol, including a phone call from his family about 9,000 miles away. The hotel staff outdid themselves with

a long table, a large birthday cake, heaping bowls of strawberries and cherries, wonderful hors d'oeuvres, champagne, vodka, and so on. Anatol played the piano. Later Bob Merton went again to the restaurant on the mountain and ran into four Russian engineers. With the help of a dictionary, sign language, and a series of toasts, they considerably furthered good will.

On the night of our arrival, May 21, Eve went with most of the group to the hotel on the hill reached by cablecar, planning to return by funicular. They could not eat on the terrace because of bad weather, and the restaurant itself was noisy with the usual loud band. The management of the hotel allowed the group to stay until two o'clock although the hotel normally closed at twelve. The people who ran the funicular also stayed around to get them down the hill at the end of their evening.

The ousting tactics of Intourist continue. Today Eve and some of the other wives went with the Intourist guide to get ice cream. The woman in charge of the shop said there was no place for them until the guide murmured the magic word "Intourist," whereupon there was immediate shifting of places and tables until room was made. This is convenient for Americans but puts them in a bad position with respect to local people.

We have discovered one slight sign of dishonesty on the part of a hotel employee. A bottle of vodka has twice gone down in level when we have been out. The second time we left a mark to make sure, and a healthy nip had been taken out when we got back.

Barbara and Eve had lunch in an open-air restaurant. The waitress came and sat down in a spare chair while she took their order. She did this at other tables too. When, however, some lemonade was spilled on a table, she waited until a special kind of servant came to wipe it up, since that was not her job. A man dropped over to talk to Eve and Barbara while they were having lunch. They explained that they were here with a delegation, and that their husbands were professors. He explained with pride that he was a chauffeur and drove a car.

The people in Tbilisi have been particularly interested in Eve's open thong sandals which are referred to locally as "Roman sandals". They often attract not only attention but comment. At one point Eve was waiting outside a store for someone and a crowd gathered, looking at her until she went back in to avoid feeling like an animal at the zoo. Another time, as two men walked by, one pointed at her shoes and made some comment, and they both burst into laughter. Staying at our hotel is a very large delegation of Cubans. There must be 35 or 40 of them, some very dark Negroes, some Spanish, and some still fairer. Some of the girls wear skin-tight pants, strange hairdos, strongly marked eyebrows, fancy earrings, and heavy makeup. The group was outside the hotel this afternoon surrounded by an enormous crowd.

Eve went to a local museum, the guide describing in detail perfectly awful pictures depicting the life, times, and history of Georgia. There was a model of an old extant house in the Georgian style, Eve asked to see it, and the group drove by the house. Nearby were kindergarten children in a playground. Bob Merton started to take pictures and the children quickly lined up, 15 or 16 of them, all grinning. The bigger boys got out of line, and the teacher approached and arranged them in proper order for the photograph.

This morning we visited the Institute of Pedagogy where we found some interesting work. The Institute has a tradition of research in education. A number of ingenious toys teach kindergarten children color, form, size, shape, and so on. Games are usually played with the equipment by two, three, or four children. In one a ball is thrown, somewhat in the manner of a roulette wheel, and as it approaches the middle of the device it falls through a hole tipping up a colored banner. The child must then find a matching token and put it in the middle of the device. If I understood correctly, each child continues to play in turn until he has tipped signals which exhaust his collection of colors. There was a similar game for shape, as well as form boards involving color, shape, and depth.

This afternoon most of the working members of the group went to the Academy of Pedagogy in a rather pleasant building near a large park. We broke up into three groups and talked with local people according to our interest. The psychologists lacked a good interpreter and not much business was transacted. However, excellent good will and friendliness prevailed. The other groups included economists, psychiatrists, and anthropologists. On the walls of one room in the Academy were some of the most interesting pictures I've seen in Russia. In particular, there was a very good set of crayon or chalk drawings on black paper showing various Negro types. They were in striking contrast to the art we have seen, but it turned out that they were Cuban and, I believe, the work of a single artist.

In the evening we all attended an appalling ballet called *Daemon*. It was elaborately staged with trick scenery, lights, and so on, more pantomime than a dance, based on a theme of an old poem. I left at the end of the first act, but the rest stayed through. Coming out of the theater I walked for some time on busy streets, watching the crowds. There were men in two's and three's, girls in two's and three's, very seldom a single man or girl except someone obviously hurrying on business. I saw nothing that could be taken as flirtation. In the restaurant after the ballet, the Cubans arrived fresh from their own performance. They are a dance group which has been appearing in various European cities. They were still excited from their success and the girls still wore theatrical makeup. One in particular was especially striking. Her full lips were rouged, her eyelids and the whole area under her eyebrows were strong blue-green, and

two pencilled lines of white were drawn out from the corners of her eyes toward her temples. These, with the whites of her eyes and her white teeth, gave the impression of a crayon drawing on black paper touched up with white. Other girls were similarly made up. Their costumes, however, were rather careless, and in some cases quite sloppy.

The following morning, May 23, a special visit was arranged to an Institute for Mother and Child. Few people were attracted by this title or interested in going. Anatol asked Eve to join the party to make up a respectable company. It is too bad we didn't all go because the whole thing was quite unusual. The Institute is composed of scientists ranging all the way from biochemists to sociologists, and all concerned with the problem of sterility. Many animal experiments were going on at the time, and the scientists had prepared an elaborate reception with food and drink. Copies of an ancient Georgian poem were given to all members of the party, each inscribed appropriately with his or her name and an expression of good wishes.

In the afternoon we went to the airport but bad weather developed and we waited for several hours, playing cards, sitting around, or sleeping. Eventually, we went back to the hotel, being told that a light plane could not take off in the rather gusty wind. It proved to be a clear evening, however, and I suspect the real reason had something to do with the availability of pilots and crew. At the hotel we had a party in Yuri's room and went to bed prepared to be awakened at a quarter to five.

I am dictating this at Sochi where we arrived shortly before noon. We went to the airport early this morning, and found a plane available. It was an old two-engine plane with unpleasant, dirty velour upholstery, smelling strongly of animals. The lavatory was filthy. We were held up before takeoff for some time because of unfavorable winds but eventually got off. The latter part of the flight was at low altitude along the coast so that we could see the resort area. It is really beautiful, much more lush than either California or Florida, because it does not need any sort of irrigation or special treatment. There were many cypresses contrasted against other vegetation. The buildings, some quite large, many of them apparently individual villas, were of stucco and in styles characteristic of the Mediterranean coast. The Intourist hotel is apparently new, large, and well, but again elaborately, furnished. The room I am sitting in has a 12- or 15-foot ceiling and three large French windows which can be covered by patterned blue curtains sliding on rather heavy wooden rods with ornate supports. One window leads out to a large tiled terrace which is the exclusive property of the occupants of this room. A large armoire takes care of clothes. The floor is herringbone parquet. There is a large mirror in a bad early modern style, a large pedestal table, two side tables, and

twin beds, all with a good deal of inlaying and unnecessary working of wood, a foot stool, and a large relaxing upholstered chair. There is a very large short wave radio, with a long list of available cities, but the plug does not seem to fit any wall outlet. Unfortunately, the day is cloudy and cold, and we shall probably not swim in the Black Sea or enjoy any sunbathing. Our plan is to leave tomorrow afternoon for Kiev, our last Russian city.

Later: The sun came out and we enjoyed some sunbathing although we didn't actually have time for a dip in the sea. The electric current came on later in the day, the radio worked, and late in the evening I picked up the Voice of America from Munich. For the first time we heard of the freedom-rider trouble in Alabama. It was our first foreign news for a month. In the evening we drove up a 2,000-foot mountain and climbed a tower for a magnificent view, with the sea on one side and the Caucasus Mountains on the other. It was late evening with the sun just setting. Mist lay in the valley, but the snowcapped peaks and the waterline were magnificent. The next day we worked in committee during the morning and then took an hour's boat ride along the coast. The coast line is extremely beautiful. Eve and I tried *kvass*, which is a drink made of bread. Whether or not it is fermented we have not been able to decide. We have noticed the casual attitude of Russian people toward small amounts of money. Twice in making change or paying for meals when I have been a bit short, they have completely overlooked it. We bought only one glass of *kvass*, planning to share it, but the girl gave us two for the three kopeks we put down. When Eve and some friends were riding in a taxi and the taxi meter clicked over to a new two-kopek reading just at the moment of their arrival, the driver reached over and turned it back to its previous reading. One constantly miscalculates in dealing with clerks. For example, we have been trying to get rid of our *taloni*—the script we bought to exchange for food while in Russia. Someone told us that some stores will take this in lieu of cash. It occurred to me to rind a store, show some interest in a fairly valuable object, and then pull out the *taloni*, on the theory that in order to make a sale they would agree to accept the script. But nobody wants to make a sale in Russia. This gives an American a bad impression of Russian stores. In a large Univermag there are many things for sale, but they are delivered over the counter as in a warehouse. There is no interest whatsoever in making them look attractive to prospective purchasers.

The automatic liquid vending machines in Sochi use paper cups instead of the glasses we have seen elsewhere in the Soviet Union, possibly in deference to vacationing visitors.

In the afternoon we drove to the airport and took a four-engine turboprop plane which was quite unusual. The wings were so high that you looked out under them and

the body of the plane was the largest I have ever seen. Three seats on each side of a broad aisle were not at all crowded, and there was a very high ceiling. The acceleration was terrific; we took off in seventeen seconds. We flew at 7,000 meters at a speed in excess of 600 kilometers per hour. The plane seemed to be much better pressurized than others we have flown in. The seats as usual were very comfortable. Because there was no need to make a scheduled intermediate stop, we flew non-stop and arrived in Kiev two hours early. This meant that we were not met, as planned, by a delegation from the Kiev Academy or even by Intourist until we had waited about half an hour. The airport, not the main Kiev airport, is in part a military installation.

I am dictating this during lunch in our room in the hotel in Kiev. The dining rooms in Intourist hotels are quite impossible. One waits half an hour or more for a badly ordered meal, and the orchestras blare out at top volume. Last night we were sitting very near the orchestra, and I found it necessary to stuff my ears with wads of Kleenex. Since we have lots of Intourist *taloni* left, we plan to dine in our rooms hereafter.

All stores in Russia seem crowded. This is partly due, I suppose, to the fact that large numbers of people are out wandering in the streets. This morning there was a line of about fifty people waiting near a store near our hotel. Later the line had grown to about a hundred. Yuri made some inquiries and learned that the store had received a fresh supply of goldfish food! Either Russian people are very fond of their goldfish or they do not mind standing in line. I rather think the latter is the case. They stand and talk; it is just a way of spending an hour. At one point Eve inquired of an Intourist guide how long they would have to wait in line and was told five minutes. She then suggested that they go somewhere for a cup of coffee, but the guide was surprised and repeated that they would only have to stand in line five minutes. This may also explain why Russians are willing to let Americans take forward positions in lines. After all, they may as well be standing in line as walking in the streets.

We have seen modern furnishings only in snack bars or small restaurants. There was one in Tbilisi and there is one here in Kiev which Eve and some of the others patronize. The chairs are molded plastic, orange, black, yellow, and zebra striped, and the ceiling, instead of chandeliers, has built-in molded plastic lights, brilliantly lighted. The windows are floor-to-ceiling glass, and the tables are in a geometric pattern in plastic. In Kiev we have both been approached by boys asking for chewing gum, pencils, and pens; in my case, nothing was offered in return, but with Eve they were offering stamps.

This morning Jim Miller, Ray Waggoner, and I went to the Institute of Physiology where we learned about the structure of the Institute and its work. Incidentally, I have

been struck by the names of the Institutes—the Bechterevo Institute, the Sechenov Institute, the Pavlov Institute, and so on. My first impression was that they were advertising their scientists. On the other hand, the comparable American institutes are named after the men who gave the money, and in the long run it seems more important that they be named after people who have made contributions of an intellectual or scientific nature.

The Institute is rather elaborate, with many divisions but only an indirect connection with a medical school. There is some Pavlovian work going on, although we got no details. Just before leaving, and we were under pressure for time, they showed us a very ingenious apparatus which presents various forms or words to a subject at a controllable rate. The subject is to press one of two keys or neither according to the category of the figure or word. They study the rate at which a person can name categories. The recording is done by pens writing on white 35 mm film—a rather expensive material, but it can be driven by the same sprocket system as the film bearing the words or figures. The Russians have good devices for projecting figures, resembling our hand-viewers for 35 mm film.

At the Institute of Psychology Professor Kostiuik has a group of people working on techniques of teaching thinking, using machine design, mathematics, and grammar as subject matters. They have been comparing the effect of showing a student how to do something with allowing him to figure it out himself, using hints and other suggestions. Showing the student gets immediate results, but in the long run the less direct method gives better performances (indeed, levels of performance not otherwise reached) and better retention.

Incidental item: In spite of the general belief that Russians easily learn other languages, we have not found many who understood English, French, or German. Occasionally, a few words of German will be used. I have found practically no French, except for Leontiev and Kostiuik, both of whom speak it well. The average person does not respond to English, French, or German, even of a rudimentary sort, and even service people in Intourist hotels are quite inadequate. The Intourist guides are sometimes good. The girl we had today has done a fine job of translating, but the man we had in Sochi could barely get through his memorized recital of the sights we were seeing. Bob Merton met a girl who spoke absolutely perfect English with an American accent yet claimed never to have been out of Russia. (Of course, she may have lived in America but not have wanted to reveal it. This seems more plausible than that she had learned perfect English in Russia.) A distinguished Harvard linguist, originally Russian, is scarcely able to speak intelligible English after having specialized in linguistics all his life. Other Russian friends who have been in America for many years still speak with a strong accent.

Saturday evening, May 27. I have just finished my lecture before a large crowd. The first question afterward—can you teach creative thinking by machine?

Later in the evening we went to a circus—a large one-ring affair in a special building, holding about 2,000. The performers were a travelling company of Czechoslovakians. There were the usual acrobats, trapeze artists, and several animal acts, including eight polar bears, a group of four ponies, two chimpanzees, four zebras, and five elephants. The trapeze artists performed without a net, although Anatol was under the impression that it was illegal in Russia to do so. The clowns were very funny and not sadistic. The building was built for very efficient entrances and exits on all sides. You get your coat immediately from extensive coat racks. This led us to reflect again on the long time it takes to get an evening dinner. Evidently this is not due to inefficiency but to preference. The Russian who is dining out doesn't mind taking two or three hours, especially if a loud band is playing American jazz. After the circus, we asked the Palmers to come to our room and ordered a meal which was served quite efficiently and quickly. It was delicious, and we spent a pleasant evening, in part drinking up our remaining *taloni*.

Next morning two of our group, out for an early walk, joined a large crowd waiting for someone to go by. It turned out to be Khrushchev, who is here for two or three days before going to Vienna to meet Kennedy. (Eve now understands the efforts toward communication by the chauffeur she met yesterday; he was trying to say that Khrushchev was to be in Kiev.) He drove by in an open car, preceded and followed by other cars but with no armed guards of any sort. The crowd pressed out into the street, so that he went by within two or three feet of bystanders. The crowd was silent; there was no cheering, but Khrushchev nodded to them and there were smiles afterward.

During the morning (May 28) we had a two-hour session with Yuri, getting his views on Russian education. After lunch, we went on a sightseeing tour, stopping first at a store where some of us bought Ukrainian embroidered shirts. We bought Ukrainian blouses for the girls and a strip of patterned cloth which I hope to be able to use for a curtain in my study. The tour covered a beautiful old cathedral still maintained as part of the Soviet system of museums, and a visit to a large statue of Saint Vladimir who is famous for having forced Christianity upon the Ukrainian people. He carries a large cross, very conspicuous on the mountainside. Evidently, the Soviets are by no means afraid of a counter-revolution in religion and are perfectly willing to allow these monuments to remain as curiosities. Our delightful Intourist guide, who has presumably grown up entirely in the Soviet culture, explained to us some of the mosaics in the cathedral and called one of them "God's mother."

Jim and Jessie Miller visited the same park last night around one o'clock. There were many couples sitting on benches, necking. At one o'clock all the lights went off,

and the couples immediately stood up and marched to the bus lines and thence presumably home. There was absolutely no emphasizing of sex in the circus last night. The only possibly risqué act involved a clown who was carrying a suitcase from which something was dripping. Two other clowns called out "Vodka, Cognac," and so on, and collected a few drops and tasted it. Thereupon, the first clown opened the suitcase and a small dog came out. This was a great surprise to the audience and I saw some rather embarrassed smiles.

Sunday, May 28. We leave in half an hour for an evening reception tendered by the local psychologists, and depart early in the morning for Prague. Kiev is very beautiful. Forty percent of it was destroyed during the war, but it has been completely rebuilt and there are new large areas under construction. One of these, across the Dnieper, will be connected with the main city by an extension of the Metro, and parts of it are being dredged for a Venice of the East, with apartment houses on canals. The skyline, as in Moscow, is dotted with cranes and new apartment houses. Our guide explained that shortly after the end of the current seven-year plan every family in Kiev will have a flat to itself. The total time required will be nine years. The Intourist guides are obviously very safe followers of the party line and are often amusingly naive in their comments. At the University there is a "Patrice Lumumba Hall," where Negro students study. The guide seemed to be entirely unaware of the issues involved in the Congo revolt, Patrice Lumumba being to her naturally a hero. Contrary to the advice we were given before leaving for Russia, there is very little curiosity about America, especially on the part of officials such as the Intourist guides. American clothing does attract attention. Eve has worn a small black hat, mostly veil, upon occasion, and it invariably attracts attention. Her charm bracelet arouses all kinds of questions, and various kinds of shoes are constant objects of observation.

We are having difficulty in coming out just right on rubles and *taloni* at the end of our stay. I asked our Academy guide, Yuri, what would happen if we arrived at the border with many rubles. Would they be confiscated? He explained we would be permitted to buy things at the airport. But the things we have seen at airports are atrocious souvenirs, and we shall be there at five o'clock in the morning, before the shops are open.

The young boys in Kiev are just beginning to catch on to the possibility of exchanging pins for chewing gum, pencils, and ball pens. They don't approach us easily and are not skillful or charming in their manner.

Monday, May 29, proved to be a day spent almost entirely in travel. We were up early and took a Czech plane from Kiev. It was a slow two-engine job and made an intermediate stop where we were officially checked out of Russia. We then landed at Bratislava and were told that the flight would wait there because of bad weather at Prague. Fortunately, there were customs authorities at Bratislava and some of our time was spent going through Czechoslovakian customs. After several further delays, we were taken into Bratislava by the airline and given a delicious luncheon. It was one of the most enjoyable meals we have had. Our departure was further delayed as we debated whether to take the train to Prague or, in my case, to Vienna for connecting accommodations. However, the situation in Prague improved, and we flew in, arriving at our hotel at about quarter after five. We were met by Dr. Horvath²⁵, who had visited my laboratory in the United States, and by several other members of the psychological community in Prague. Anatol and I were asked whether we would be willing to give lectures beginning at six o'clock. Although we were dead tired, having got up at what now amounted to two o'clock that morning (taking into account a two-hour time change) we readily agreed. After a brief cleanup, we were taken to a large hospital amphitheater, where Anatol lectured for an hour in Russian and I lectured in English on operant behavior and teaching machines. There was a great deal of informed interest, in fact, a more modern and up-to-date interest than I had discovered anywhere in the Soviet Union. After dinner at the hotel (which Eve and I skipped because we were tired) some of us went to Dr. Horvath's house for a brief reception. The contrast between his house and that of Luria's is striking, as in general is the contrast between Prague and Russian cities. Here there are many private cars, and the shops seemed to be supplied with more and better goods in greater variety. For example, we saw two different types of vacuum cleaners displayed in one store, and the shop windows are dressed to attract trade. The contrast is also shown in our hotel, where there is a very comfortable cocktail lounge and restaurant, where the rooms are much more sumptuous, and where the bathroom works perfectly in the Western tradition (it even contains a bidet). Dr. Horvath would certainly rank below Luria as a scientist, yet where Luria had a rather miserable back-alley flat of three rooms, only one of which was livable, Horvath lives in a large duplex with a private garden approached through an alley paved with cobblestones and guarded by a large iron gate. His house was luxuriously furnished, the room in which we had supper and cake and

²⁵ Milan Horváth (1921), Doctor of Natural Sciences., Charles University, Prague, and Ph.D. (Medical Physiology). Retired Senior Research Scientist, National Institute of Public Health in Prague. Associate Professor (retired.) at the 3rd Medical Faculty, Charles University. Lecturer at the Psychology Department of the Education Faculty and at the Postgraduate Medical Institute.

coffee being elaborately paneled in some kind of hard wood, not walnut or mahogany but of a kind one often sees in expensive furniture of a generation or two ago. We began first with a toast of a good wine to peace and friendship, then moved to the dining room for excellent cakes and Turkish coffee.

We returned to our hotel exhausted but awoke early this morning, May 30. Eve and I walked through the streets of Prague window-shopping and watching the early morning activity, which is considerable even as early as six o'clock. The stores in Kiev opened two hours sooner than in Moscow and closed two hours sooner, and it looks as if Prague is on a still earlier schedule. At six o'clock, all the trolleys

seemed to be functioning and the streets were rapidly filling with people. Some restaurants were just opening, although the stores were, of course, still closed.

Tuesday, May 30. Anatol and I have just come to the Prague airport where we find our flight is delayed an hour. We are hoping to make better reservations in London so that Anatol can go directly to Detroit and I to Boston.

(Anatol and I were the first to leave the group. The rest stayed in Prague, then moved on to Warsaw, where they visited Konorski's²⁶ laboratory among others. The group broke up in Berlin, going to various other points *en route* home. Eve had planned to stay for a few days in London but was so depressed by West Berlin that she came directly home).

²⁶ Jerzy Konorski (1903-1973), biologist and neurophysiologist. A student of I. P. Pavlov. He contributed to the study of Type II conditioned reflexes, was a pioneer in the study of instrumental conditioning and introduced a new direction and theories about the physiology of the brain. Director of the Institute of Biology of M. Nenski in Warsaw, professor of the University of Lodz. Member of the National Academy of Sciences of Washington. He worked with S. Miller on physiology of the higher nervous functions. Considered one of the most important investigators of theoretical Neurobiology.