

Our Friend and Colleague Alfredo Ardila

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Abstract. Distinguished Professor of Neuropsychology at the Florida International University in Miami and Albizu University (USA, Miami) Alfredo Ardila (4.09.1946–9.01.2021) was President of the Latin American Association of Neuropsychology, member of the Board of Governors of the International Neuropsychological Society and of the Editorial Board of the International publication *Lurian Journal*. A. Ardila was a leading thinker bringing and developing the ideas of A. R. Luria's school of neuropsychology to North and Latin America. He joined the community of students and disciples of A. R. Luria in the mid-1970s while studying at Moscow State University where he earned a PhD degree under the supervision of E. D. Homskaya. In this article, dedicated to the memory of A. Ardila, the authors analyze his contribution to development of the systemic-dynamic approach in neuropsychology, and share personal memories of a lifelong friendship, recalling his memorable charm and personal modesty as well as his renewed scientific cooperation with colleagues from his *alma mater* in 2008–2020.

Keywords: *Alfredo Ardila; Lurian school of neuropsychology; cross-cultural neuropsychology; adult illiteracy, aphasiology*

Аннотация. Профессор Университета Альбизу (США, Майами) Альфредо Ардила (4.09.1946–9.01.2021), президент Латиноамериканской ассоциации нейропсихологии, член Совета управляющих Международного нейропсихологического общества, член редакционного совета международного журнала «Lurian Journal», сыграл большую роль в развитии и популяризации идей школы А. Р. Лурия в Южной и Северной Америке. Он приобщился к сообществу учеников и последователей А. Р. Лурия в середине 1970-х, когда, обучаясь в МГУ, подготовил диссертацию под руководством Е. Д. Хомской. В статье памяти Альфредо Ардила авторы анализируют его вклад в развитие системно-динамического подхода в нейропсихологии, делятся воспоминаниями о многолетней дружбе с ним и его участии в научном сотрудничестве с московскими коллегами в alma mater в 2008–2020 гг., отмечают его личные качества, незабываемые обаяние и скромность.

Ключевые слова: Альфредо Ардила; школа нейропсихологии А. Р. Лурия; кросскультурная нейропсихология; неграмотные взрослые; афазиология

After graduation from the national university of Colombia in the year 1973 Alfredo Ardila came to the Faculty of Psychology of Moscow State University for postgraduate studies in the department of neuropsychology and clinical psychology headed by Alexander Romanovich Luria. His supervisor for research *Bioelectric Indices of Brain Activity During the Solving of Mnestic Problems (in Normal Subjects and in Patients with Frontal Lobe Damage)* was E. D. Homskaya.

Once Alfredo did not appear at one of Luria's traditional patient examinations which was followed by discussions and Alexander Romanovich turned to me (B. K.-F.) and said, "Such a nice fellow but he seems to be so lonely... Would you, please, take care of him?" Coming back to the hostel, where I also lived, I met an unhappy pale young man with his throat wrapped around with a wool scarf. I brought him some pills and tea with honey. We became friends for the rest of our lives.

Essentially, Alfredo and I were the same age, but his personal experiences and knowledge of the world were much broader than my own and he was sensitive to cultural differences encountered in his travels. On one occasion in a Moscow Museum, he remarked: "Note that all the representations of Jesus in these Russian paintings depict him with blue eyes. When you will be in the Prado Museum you will see only dark-eyed depictions of Jesus." It would be over forty years before I was free to travel and visit the Prado in Spain and note the exclusively dark-eyed paintings of Jesus. Perhaps it was this exposure to cultural differences that later inclined Alfredo to adapt his neuropsychology research among Latin American peasants to their cultural uniqueness. At the time Alfredo's experiences in life and in the world brought me to look upon him as an older and wiser friend with a flair for remembering his experiences and adapting them to analysis of new situations. Another such occasion was when we were strolling at parks near Moscow State University, enjoying the panorama of Moscow spreading below us. "In any free market society," he remarked, "there would be kiosks selling sandwiches and drinks, and benches on which visitors could sit and enjoy the landscape at their leisure." A few years ago, while in Moscow for

a conference I saw, around the university a sight similar to what Alfredo had described many years before: kiosks with food, tables and benches.

In the summer of 1974 Alexander Romanovich Luria invited us to visit him at his *dacha* in Svistuha. We had to discuss some details of the planned month-long seminar for a young neuropsychologist from the socialist countries (East Europe). Alexander Romanovich initiated the program and I was an executive secretary of the organizing committee. Similar meetings at his home in Moscow usually concluded with tea and music usually recorded by Luria at concerts of classical music. But this time Alexander Romanovich tried to “entertain” us, demonstrating his collection of slides with pictures of insects’ “faces” in which he could recognize some resemblance to human faces. He called the collection “My academy friends.” Alexander Romanovich used his money for publications abroad for two of his artistic and social hobbies. The modern recording and optic equipment were used to host his colleagues and he was proud that all the pictures were taken in his yard around the *dacha*. For the memory of this day, I have some pictures which Alexander Romanovich made for us (Fig. 1, 2).



Figure 1. Alfredo Ardila and Bella Kotik near the summer cottage of A. R. Luria, the summer of 1974. Photo by A. R. Luria.

Source: The personal archive of B. Kotik-Friedgut

Once his dissertation had been approved in 1976, Alfredo returned to Bogota and taught Psychology and Neuropsychology in the university, gradually spreading out to other universities in Colombia and in Ecuador, Peru, Chile and Puerto Rico, as well as participating in pioneering conferences and research projects studying the process of literacy acquisition among Mexico’s natives. Here Alfredo’s sensitivity to cultural differences

proved invaluable as he adapted neuropsychological testing and interpretation to the milieu and perceptions of illiterate Spanish speaking peasants. These projects helped demonstrate the utility of Lurian Neuropsychology as a science adaptable to widely differing societies throughout the world.



Figure 2. Alfredo Ardila near the summer cottage of A. R. Luria, the summer of 1974.
Photo by A. R. Luria, trying to teach Alfredo to deal with a Russian Samovar.
Source: The personal archive of B. Kotik-Friedgut

One of the research projects initiated by Alfredo Ardila and his colleagues in Mexico attracted my particular attention when I was invited to take part in a project dealing with a challenge facing the Israeli educational system: teaching Hebrew as a second language to new immigrants from Ethiopia, who are illiterate in their mother tongue. Despite good will and substantial efforts, the success of these immigrants in achieving literacy in the Hebrew language has been limited.

Research of the Mexican group revealed that the observed difficulty of adults in learning to read and write is rooted in the fact that important basic brain mechanisms have not been developed in childhood: illiterate subjects score significantly lower on some neuropsychological tests (Ardila, Rosselli, & Rosas, 1989; Ostrosky-Solis, Ardila, & Rosselli, 1999). Based on these results Ardila's research group developed a method for learning to read, called NEUROALFA. This method seeks to reinforce these particular undeveloped abilities during the process of learning to read. This method has proven

to be significantly more effective than traditional methods in teaching illiterate Mexican adults. What also seems important is that after learning to read, all of the subjects in both the experimental and control groups improved their performance on neuropsychological tests, although the gain in the group who had studied using the NEUROALFA method was significantly higher on some subtests, especially on the recall tasks, verbal tasks, and such tasks as Orientation in Time, Digits Backward, Visual Detection, Copy of a Semi-complex figure, Similarities, Calculation Abilities, and Sequences (Ardila et al., 2010; Ardila, Ostrosky-Solis, & Mendoza, 2000).

So, facing a similar task trying to improve results of teaching illiterate adults, I called Alfredo asking for details on how and where to get the NEUROALFA materials. He explained to me that all the existing materials are related to Spanish and also, noted that he sees that our challenge is much greater because they have dealt with people illiterate in their mother tongue, while our task is to teach a new language to people illiterate in their mother tongue.

That is why I used their idea of reinforcing basic neuropsychological factors underlying literacy acquisition and developed recommendations for the project. I suggested enhancing the following neuropsychological abilities while teaching a second language to Ethiopian illiterate adults: (a) phonological abstraction: exercises emphasizing phonological awareness, phoneme discrimination, phonemic fluency, phonological similarity, decomposition of words to sounds and letters, grouping of words with common phonemes, and cross-words; (b) semantic categorization; (c) finding similarities; (d) visuo-perceptual abilities, spatial exercises including spatial orientation of words, spatial discrimination of letters, discrimination of ambiguous pictures; (e) exercises emphasizing verbal memory, i. e., recalling sentences; and (f) abstracting abilities, proverb interpretation (Kotik-Friedgut, 2012). To better meet social and vocational needs of Ethiopian immigrants, we revised the existing model of literacy teaching for adults and developed an alternative *communicative-multicultural-neuropsychological model*. This approach is based on cultural-historical approaches developed by Vygotsky and Luria and cultural neuropsychology, and the results are positive (Kotik-Friedgut, Schleifer, Golan-Cook, & Goldstein, 2014).

I recall an improbable episode testifying to our relation and connection over many years and continents. While working at the Rostov State University (1975–1992) I gave a talented student from Colombia, G. Vergara, a recommendation letter to Alfredo, who worked at the time at the National University in Bogota. The following year, a girlfriend of Gabriel, also my student 2 years younger, from Mexico, on her way for vacation stopped at Bogota to spend some time with her friend. When she came back, she told me, that in the airport Gabriel showed her a man at some distance at the registration for the same flight and said, “This man is a friend of Bella Samoylovna.” On the airplane she asked to be seated with him and they had time to talk. Later Alfredo in his letter said, “Isn’t it a miracle? To fly from Bogota to Mexico and to speak about you?!” (by the way, recently this girl, now a Mexican researcher Miriam Ponce contacted me via internet, asking for the copy of our last paper).

We had not seen each other for 22 years, but there always were letters. In one of his letters in 1984 he describes his activities in research in Mexico: "For a month [July] I was working with your cousin. We were talking a lot about you." [as "My cousin" he mentions Feggy Ostrosky-Sollis, the family relation is unknown, but my grandmother was Ostrovsky]. Later in 1985: "My work is O.K. I am researching, publishing, teaching, and I feel that I am enjoying an active academic life." In 1998 when I came to Boca Raton (Florida) where my husband Ted Friedgut had a lecture at a conference, Alfredo came from Miami where he had settled for a short visit with his wife Monica and their children. And later, when Internet became a part of everyday life, our professional collaboration became much easier.

While working at the Hebrew university in Jerusalem, I initiated the translation into Hebrew of L. Vygotsky's *Thought and Speech* and started to teach neuropsychology for teachers based on the Lurian Systemic-dynamic approach. It became important to translate for educators and to introduce the neuropsychological meaning of the concept of extracortical organization of higher mental functions as a basis for development and usage of scaffolding in the teaching-learning cooperation process (Kotik-Friedgut, 2002). After that our professional interests coincided even more closely and we cooperated in promoting the Lurian approach in development of cultural-historical neuropsychology. As mediators (material or symbolic) are considered to be intrinsic components of higher mental functions, the Vygotskian principle of the extra-cortical organization of psychological processes is fundamental in the development of Lurian neuropsychology and his interpretation of the brain's organization of cognition (Kotik-Friedgut & Ardila, 2004). Living conditions have so dramatically changed during the last 100 years with development of new media and new virtual ways of communication that it has to be taken into account in analysis of development and brain organization of cognitive functions (Kotik-Friedgut & Ardila, 2014).

We all witnessed how the last year changed our life and cultural neuropsychology remains important for dealing with its consequences in the future.

During the last decade one could meet Alfredo at international conferences in Portugal (Fig. 3) and in Russia (Fig. 4, 5, 6) and the last meeting at the Summer International Neuropsychological School named after A. R. Luria in August 2020 which was online virtual because of the COVID pandemic (Fig. 7).

In 1984 Alfredo Ardila and Feggy Ostrosky-Solis edited a very comprehensive volume of reviews of state of the art analyses of a range of different aspects of brain functional asymmetry. He was rightfully proud of the result and wrote: "I am sure you have already received The Right Hemisphere: Neurology and Neuropsychology. Isn't it beautiful?" It included my (B. K.-F.) chapter "On the Role of the Right Cerebral Hemisphere in Speech of Bilinguals" (Kotik, 1984). That was the time of very active worldwide interest in the problem and some data of historical importance we used in preparing a new manual for the neuropsychology course (Azarova & Kotik-Friedgut, 2021).



Figure 3. Alfredo Ardila, Monica Rosselli, Ted Friedgut, Bella Kotik-Friedgut at the 4th Estoril Vygotsky Conference (Estoril, Portugal, June 2016).

Source: The personal archive of B. Kotik-Friedgut



Figure 4. Bella Kotik-Friedgut, Alfredo Ardila and Monica Rosselli at the Fifth International Luria Memorial Congress (Kisigach, Russia, October 2017).

Source: The personal archive of B. Kotik-Friedgut

In 2008 inspired by some nostalgic feelings Alfredo Ardila started to communicate with colleagues neuropsychologists of the Moscow University and proposed to give a lecture, “I would prefer to talk about ‘On the Evolutionary Origins of Executive Functions’ (that’s a topic I am currently most interested in [Ardila, 2008]. I can present the lecture in English (or in Russian-English).” The first lecture was a success and a beginning of an active cooperation with colleagues and a regular course in English *Some Fundamental Questions in Contemporary Neuropsychology*, for students and researchers of the faculty of psychology. The main themes in the course were: How localized are the language areas in the brain? A new neuropsychology for the 21st century; Vygotsky in the 21st century; Executive functions and language; A proposed reinterpretation and reclassification of aphasia syndromes; Origins of the language from the aphasia perspective; Cross-cultural neuropsychology. Later Monica Rosselli joined him in this course adding topic related to developmental neuropsychology (Fig. 5).



Figure 5. Monica Rosselli, Alfredo Ardila, and Yuriy Mikadze (organizer of a series of lectures) in the auditorium of the Faculty of Psychology of Lomonosov Moscow State University. Source: The personal archive of Yu. Mikadze

A. Ardila initiated a cycle of publications to show that ideas of Luria continued to influence significantly during the 21st century. Thus, new scientific achievements and clinical observations have significantly supported many of his suggestions and hypotheses. One article describes the basic concepts of neuropsychological evaluation and rehabilitation, associated with the method of syndrome analysis developed by Luria for diagnosis mental function and focus on the qualitative interpretation of the results neuropsychological diagnosis (Mikadze, Ardila, & Akhutina, 2019).

Another paper presents the views of A. R. Luria on the brain organization of speech and aphasia. Although A. R. Luria developed his concept of the relationship between cognitive processes and brain work several decades ago, scientific, and technological achievements in our days largely confirm many of his ideas and hypotheses. A. R. Luria's basic views of the brain and language are considered in this article in the light of modern neuroscience. It is shown that his interpretation of the cerebral organization of speech as a specific contribution of various brain regions to the speech system continues to be widely used, and his significant contribution to neurolinguistics is widely recognized. Many ideas of A. R. Luria have been integrated into contemporary aphasiology, while some questions of his proposed classification of aphasia remain debatable (Ardila, Akhutina, & Mikadze, 2020). Another paper focused on the influence of A. R. Luria's on cultural neuropsychology in the 21st century (Kotik-Friedgut & Ardila, 2020).

He was teaching every year till 2019, modestly asking for himself only accommodation in the hotel situated at the university building, where he lived as a young student. His friends tried to entertain him and Monica and make his visits not only related to lectures, but also to walks around Moscow. Dinners at Georgian restaurant after lectures became a tradition since Alfredo and Monica liked Georgian food (*Fig. 6*).



Figure 6. Old and new friends: Antonio Puente, Yuriy Mikadze, Monica Rosselli, Tatjana Akhutina, and graduate students of the Faculty of Psychology Elena Lysenko and Maria Bogdanova in a Georgian restaurant.

Source: The personal archive of Yu. Mikadze

In 2020 the pandemic situation and health problems interrupted this work, though in August Alfredo took Part in the Summer International Neuropsychological School named after A. R. Luria (*Fig. 7*).

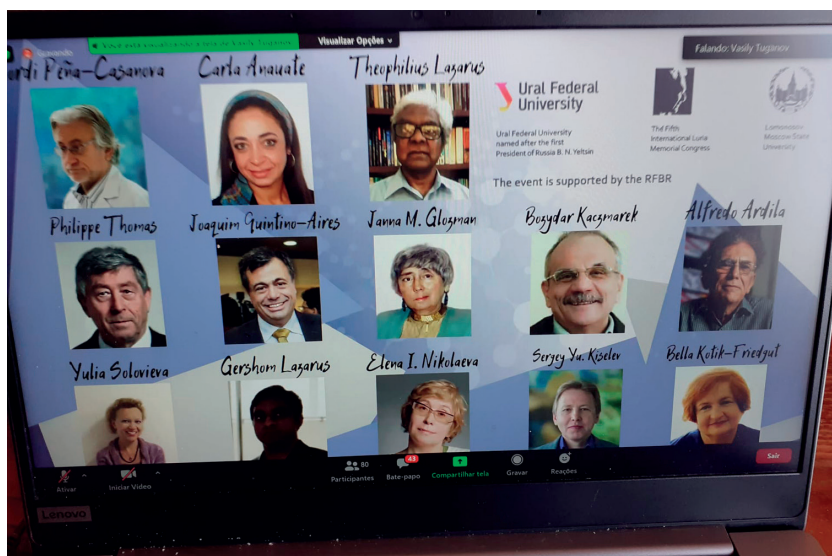


Figure 7. Lecturers of the 2nd Summer International Neuropsychological School named after A. R. Luria (August 2020, online)

Alfredo became well known for his generous sharing of knowledge and welcomed in Moscow. He also collaborated and gave lectures for the department of psycholinguistics and international communication of the Sechenov university. Active collaboration with the RUDN university in addition to lectures also included publications the RUDN journal *Psychology and Pedagogy*. All this unfortunately was short and tragically ended in January 2021. His memory will be cherished by friends and colleagues.

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Original manuscript received November 11, 2021

Revised manuscript accepted February 05, 2022

First published online April 11, 2022

To cite this article: Kotik-Friedgut, B., & Mikadze, Yu. V. (2021). Our Friend and Colleague Alfredo Ardila. *Lurian Journal*, 2(4), pp. 107–117. doi: 10.15826/Lurian.2021.2.4.7