The Enduring Contributions of A. R. Luria to World Psychology

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What Kind of Man was ARL?

- He was an international man of science.
  - Journal of Genetic Psychology
  - International Conference at Yale
  - Drew upon German, English, and American contemporaries
  - Organized international expeditions.
  - Published in many languages
  - Organizer of international conferences
  - Tireless world wide correspondent

- He was tenacious champion of LS Vygotsky
How is he seen by the academic community?

• As the “father” of neuro-psychology.
• As a pioneer cross-cultural psychologist
• As a major contributor to theories of mental retardation and methods for remediation
• As the classic expression of romantic science
My Personal Experience of ARL
Luria and Neuropsychology

- ARL’s work widely accepted as foundations of current neuro-psychology
- His neuro-psychology is the application of a general theory of human mind, the cultural-historical school of ARL’s colleague/mentor, LS Vygotsky.
- Knowledge of earlier research program essential to understanding his neuropsychology
- This argument has been strongly confirmed in the work of Tanya Akhutina, Janna Glozman, Bella Kotik-Friegut and other well known students of ARL
ARL Beyond and Before Neuropsychology

• Knowing other minds - *The Nature of Human Conflicts*

• Cross-cultural research - *Cognitive Development: Its cultural and social foundations*

• Language and mental development - *Speech and the Development of Mental Processes in the Child; The Role of Speech in the Regulation of Normal and Abnormal Behavior*

• Romantic Science - *The Mind of Mnemonist; Man in a Shattered World*
The Nature of Human Conflicts

• How/when can we know what another person is thinking?

• **Indirectly** – as reflected in observable voluntary behavior. (Note: Indirect=mediated)

• “Combined motor method”
  – Subject asked to keep one hand steady while responding to verbal stimuli by squeezing a bulb
  – Steady baseline of stable responding achieved to random words
  – Critical word related to hypothetical event introduced
  – Is there selective disruption of the coordinated response?
Combined Motor Method

• Trivialized as prototype of lie detector test, but implications quite general.
• Example: Diagnosis of reading difficulties in children
• Question- Asking Reading
  – Small group activity organized around script for reading with many roles.
  – Achieve coordination of the activity and watch for selective discoordination of different children
  – Differential diagnosis and remediation.
• Space Bridges
Culture and Development

• Cross-cultural work in Uzbekistan and Kirghizia.
• Period of rapid (forced) modernization; changes in economic activity, schooling.
• Example: Syllogistic reasoning
  – In the far north, where there is snow, all the bears are white
  – Novaya Zemlya is in the far north
  – What color are the bears there?
Reasoning and Cultural-Historical Shift in Thinking (1)

- For most traditional subjects:
  - When posed syllogisms with contents not directly experienced, refusal to answer.
  - When posed syllogisms about familiar contents (cotton growing in another region), very reluctant to draw conclusion from the words alone.

- For people with some level of schooling, logical responses seem obvious.

- Conclusion: Cultural-historical change associated with fundamental shift in thought toward paradigmatic, scientific concepts.
Reasoning and Cultural-Historical Shift in Thinking: Subsequent Fate

• Issues raised are still focus of active research.
  – Basic trend of results widely replicated, but interpretation controversial
  – When framed in terms of fantasy objects, non-literate people and very young children do reason from words alone.
  – Even college students fail to reason logically to syllogisms under a wide variety of conditions

• While underlying mechanisms and generality still debated, principle of cultural-historical change widely accepted
Language and mental development

- the advent of normal speech changes the entire mental life structure of children: ability to plan, to execute plans;
- *the regulatory function of speech is steadily transferred from the impulse side to the analytic system of meaningful connections which are embodied in language.*
- Simultaneously there is shift from the external to the internal speech. Emergence of self control
- This line of research has become foundational to the study of development of executive function, ADHD, educational enrichment programs, etc.
Romantic Science: Resolving the idiographic/nomothetic divide

- Problem of individual versus general laws present in ARL’s earliest research.
- Avoid reduction of living reality to abstract schemas: “grey is every theory, evergreen the tree of life”
- Preserve spirit of clinical analysis while using laboratory methods to enable generalization.
- Two case studies, a mnemonist and a severely brain damaged man, illustrate this approach.
- Each person was studied over many years
The Mnemonist

- The mnemonist had a “photographic memory” he could recall number matrices many years later and did not need to write things down.
- This ability, associated with synesthesia, also a problem. Memory highly dependent upon concrete circumstances: *Un-mediated*
- This difference in memory was part of an overall personality; sense of self, difficulty being organized and relating to other people.
- Illustrates systemic, interdependent, nature of human psychological processes.
Man With a Shattered World

- Victim of traumatic brain injury to posterior parieto-occipital regions - fragmented vision and extreme trouble combining sensory impressions into a coherent whole.
- Inability to read, write, locate parts of his own body, recognize his own hometown.
- Using neuro-psychological principles from his theory ARL organized clinical rehabilitation.
- This tradition adopted by Oliver Sachs and is central to my own work in past several decades
Enduring Contributions

• The “Father of Cognitive Neuroscience” (The interdisciplinary field that investigates interrelations among culture, mind and the brain)
• Model of internationalism in science, even in times of conflict.
• Model of how to combine science and humanism, theory and practice.
• A model we should remember for the benefit of future generations.
Additional Sources

• There is a special web page devoted to the publications about and by Alexander Romanovich including interviews with Bruner, Das, Lubovsky, Sachs, Tulviste, Zinchenko. http://luria.ucsd.edu/AudioVideo/index.html

• Children’s Film Space Bridge illustrating use of Luria’s ideas about knowing other minds. https://www.youtube.com/watch?v=SiF4SwTmVBw

Для статей М. Коула на русском языке см. http://lchc.ucsd.edu/Mike