## On the study of culture and mind: Interview with Prof. Michael Cole

By Vlad Gläveanu EJOP Editor

Culture and mind represent, in themselves, perhaps the two most complicated phenomena to ever be studied. Their massive complexity has posed, for centuries, great challenges to researchers from a variety of fields. It is therefore all the more difficult to understand the interconnection between the two. And yet, as Professor Michael Cole and, more broadly, cultural psychologists would argue: there is no way of making sense of one if we disregard the other. Culture and mind constitute each other through action and communication and it is their intricate relationship that holds the key to understanding human nature and human society. Professor Cole, one of the pioneers of cultural psychology, discusses in this interview the theoretical and methodological difficulties that have shaped his work for several decades, a work accompanied at times by great frustrations but also remarkable rewards. For it is in studying culture and mind, rather than culture or mind, that we can come not only to appreciate development but find ways to actively and efficiently support it.

Michael Cole is Professor of Communication and Psychology at University of California San Diego; member of the Laboratory of Comparative Human Cognition (LCHC). His work focuses on the elaboration of a mediational theory of mind. He has conducted cross-cultural research on cognitive development, especially as it relates to the role of literacy and schooling. His recent research has been devoted to a longitudinal study of individual and organizational change within educational activities specially designed for afterschool hours. According to Cole's methodology, mind is created and must be studied in communication. His published work is extensive; among the titles: 'Cultural psychology: A once and future discipline'; 'The cultural context of learning and thinking' (edited with J. Gay, J.A. Glick and D.W. Sharp); 'L.S. Vygotsky, Mind in society: The development of higher processes' (edited with V. John-Steiner, S. Scribner and E. Souberman). In 2010 Professor Cole was awarded the American Psychological Association Award for Outstanding Contribution to the Application of Psychological Research to Education.

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**EJOP**: Professor Cole, your work in psychology spans over almost half a century and constitutes a landmark for specialists in various branches of the discipline, from educational and developmental to social and cultural psychology. You have made essential contributions to our understanding of the human mind, its development and intrinsic relation to culture. What would you say are the main themes that have been central to your work, covering topics as varied as intelligence and cognitive development, literacy and schooling, culture, activity theory, methodological issues and many more? What would be the 'guiding principles' that shaped your theoretical and empirical investigations?

**Michael Cole:** Thank you for your flattering evaluation of the significance of my work (there is no accounting for taste, but it's nice to think that yours is excellent!).

My central professional interest has been focused on the role of culture in constituting human nature. Trained as an experimental learning theorist, in the American behaviorist tradition, my introduction to the study of cultural variations took place within the context of 1960's of an applied project – to figure out why rural Liberian children from social groups living in subsistence agricultural circumstances with no tradition of literacy experienced severe difficulties in mastering elementary school curricula modeled on the practices of the industrialized world. Consequently, it is perfectly natural that my work would focus on the role of educational processes in psychological development. Once one enters that domain, question of psychological testing, IQ, literacy, etc. cannot be avoided. I chose to meet them straight on, as best I could.

This work, initially begun more or less at "the psychological level" initially focused on questions of methodology, in particular the logical problems of inferring lack of competence from lack of performance when psychological tests and educational practices developed in the Euro-American tradition were used as standards of evaluation in alien cultural surroundings. The methods used were an insult to the logic of experimental science I had learned in graduate school.

But the effort to supersede these problems did not appear resolvable remaining at the level of methods. There was no sufficiently comprehensive theory available to account for all that I was witnessing. Consequently, I was pushed into a protracted period of exploring anthropological, sociological, and linguistic methods and their attendant theories. I emerged from this experience convinced that inter-disciplinary collaboration and the building of a synthetic methodology was essential to allow progress on understanding the role of culture in development. Literacy, testing, education, all became specific examples of historically constituted cultural practices that needed to be understood.

Serendipitous events took me to Moscow early in my career, leading eventually to my appropriation of the ideas of L.S. Vygotsky and his students, in combination with Anglo-American social science approaches to culturally organized activities, as a foundation for pursuing the general problematic of culture's role in the constitution of mind.

Over time, interdisciplinarity, formulation of cultural-historical approach to mental life (which required adoption of a "genetic" approach that includes phylogeny, cultural-history, ontogeny, and microgenesis), and a serious commitment to the need to develop theory in close relationship to cultural practices, became guiding principles of my work.

**EJOP**: What are the projects you are working on at the moment and how are they continuous (or not) with your past interests?

Michael Cole: I continue to work on the same problematics, but the form that my work takes has changed. I became convinced after two decades of cross-cultural work that despite their obvious attractions, cross-cultural psychological research was a quagmire of methodological problems that had to be addressed. They could not, in my case, be addressed in a cultural setting and social circumstances such as those I encountered in Liberia and rural Mexico. I would never learn enough about the local culture and its language to learn what I thought had to be learned in order to go more deeply into such issues as the role of literacy in mental life or the conditions that optimize the developmental potential of education.

In the early 1980's we began to shift markedly from the "ethnographic psychology and experimental anthropology" approach that my colleagues and I used up to that time. Armed with our own amalgamation of Russian and Anglo-American ideas about cultural mediation and activity, we began to use our ability to create settings that embodied the principles of our theoretical approach (using the acronym, CHAT, or Cultural Historical Activity Theory) as a means of testing and expanding the theory by evaluating its effectiveness in practice. (It did not take us long to realize that the "applications" in practice were a rich source of evidence for how to improve the theory!).

**EJOP**: Your work has greatly helped the 'rediscovery' and shaped the development of cultural or socio-cultural psychology especially in its Russian cultural-historical sources. There have been now several decades since cultural psychological theories and methods became more and more central for the 'neighboring' fields of cognitive, social, developmental and educational psychology. How would you assess the evolution of cultural psychology and its future perspectives? What have cultural psychologists 'learned' and what is yet to be 'learned'?

**Michael Cole**: The "rediscovery" of cultural psychology was promoted by several scholars at about the same time that international psychology was celebrating the centenary of experimental psychology in the late 1970's and 1980's. These included Douglas Price-Williams, Steven Toulmin, Richard Shweder and others.

Clearly, the field has broadened enormously over the past few decades. By my reading, experimental social psychology has become the dominant strain in this movement. While there is a great deal to learn from this work, in many ways it seems to be re-living the arguments of "cultural style" that roiled cross-cultural psychology in the 1960's and 1970's. With the advent of various priming procedures, this line of work appears to be re-tracing the path we once traced into the ways in which experimental settings and procedures elicit the use of various cultural-schemas or frames reveal enormous heterogeneity with the broad categories of cultural-style theories; this heterogeneity appears most attributable to psychological effects at the level of cultural practices as a more promising point of entry. There are clear affinities of this view to the work of French sociocultural theorists such as Perret-Claremont, social representation theory of Moscovici and his followers, the cultural semiotic theories of the group at (Zittoun et al.). There are clear affinities as well to discursive psychology and all forms of socio-cultural theory prevalent in Europe in different "flavors."

CHAT as I understand it, emphasizes the mutual constitution of thought, feeling, and action in the interplay of activities and their systems of cultural mediation as they develop across phylogeny, cultural-history, ontogeny and microgenesis. This perspective has recently been called "bio-cultural co-constructionism". I like that "brand." It's catchy. But I personally value the kind of "genetic analysis" practiced by followers of Vygotsky; it is seen very clearly in Luria's work on restoration of brain functions, where all relevant genetic domains are simultaneously brought to bear on the problem at hand.

As noted above, the "flavor" of CHAT that we practice is something of a hybrid. While in later years we came to value the work of A.N. Leontiev, we came to the

concept of activity from the perspective of cognitive ethnographers, anthropologists who sought to study cultural variations in subtle ways within local cultural conceptual frameworks. We were strongly influenced by the work of micro-ethnographers, ethnomethodologists, and various kinds of discourse analysis. Oddly, we came to appreciate the issue of cultural mediation in seeking to understand literacy as a form of cultural practice, a term that bears a strong relationship in English to an activity.

We differ from a number of our CHAT colleagues in a manner that rests on the issue of cultural progress. We have consistently argued that all stage theories of development, be they from psychologists such as Piaget, Vygotsky, and Luria, or from social theorists such as Spencer or Marx fail to account for the enormous variability within stages that, in our view, is an essential source of change, whether historical or psychological. Moreover, they read the forms of complexity that they value and depend upon as a universal yardstick of "levels of thinking." Like Steven J. Gould, we think of cultural evolution more as a motely bush than a stately branching tree. We also fear greatly that homo sapien bio-cultural nature, in particular, the necessity of living in a cultural medium (the very condition celebrated in IQ scores) may make it impossible for us to survive in the ecosystem that our cultural achievements are bringing us.

**EJOP**: As you also mentioned earlier, present times have witnessed an increased interest in Vygotsky's foundational work and the work of his collaborators. This has been helped by the series of translations of and commentaries based on materials written by Vygotsky, Leontiev, Luria, etc. You yourself had the great opportunity of getting acquainted with cultural-historical theory as a young academic from working directly with Luria. At the same time, as more psychologists (and not only) are discovering these sources several 'tensions' within the original work come to the forefront, most notably between what is considered to be Vygotsky's emphasis on mediation and Leontiev's focus on activity. How do you see these 'tensions' and 'dichotomies' (between symbolic and material, mediation and activity, etc.) if you even consider them as such? Where do you think current debates are leading and what should we focus on from the rich legacy of Soviet psychology?

**Michael Cole**: I have found it most reasonable to focus on the broad complementarity of Vygotsky's and Leontiev's work. Both understood that mediators and activities are mutually constituted. Vygotsky did not, so far as I can tell, use the term *activity*, in a manner designed to satisfy the subtleties of German philosophy. He used in various ways in various local rhetorical contexts in a variety of more or less common sense ways. He *implied* the importance of activity by designating different kinds of activities (play, learning, work – the "outside" complements to Piagetian

stages). But he did not insist on activity as the unit of psychological analysis. Focusing on the relation between language and thought, he famously proposed word meaning as the requisite unit of analysis – of verbal thinking.

Leontiev lived through the times that Vygotsky saw coming. So did Luria and a small, but stellar, group of co-workers and their students. His adaptations to the times evoke ire among some for its ideological "user friendliness" to Stalinism. Heidegger was "user friendly" to Fascism. We came to find Leontiev's work especially useful when we began doing implementation studies as a test bed for theorizing development, in our case, the development of the ability to read. Oddly, since we were initially attracted to Leontiev because of our own research into context/situation/activity, we came to understand that he, himself, did very little empirical research that advanced his own theory. However, others did carry out such research, in the domain of preschool play, for example, and this work allowed us to maintain a connection with Leontiev's thinking even if we were not hooked into his grand, Marxist, synthesis. We didn't much like its historical progressivism or its embodiment in Soviet society.

With respect to tensions around the ideal/material dichotomy: I really like the idea of artifacts as blends of the material and ideal, accumulated from joint, mediated, activity for eons of lifetimes. I stumbled upon the idea of the "ur" fusion of ideal and material in artifacts while teaching a course on mind and communication, and was delighted to find that very similar formulations had been worked out by bona fide philosophers such as Ilyenkov in the USSR and Wartofsky in the USA (both, neatly, drew heavily on Marx!). To get into detail on this matter would not be useful here. There are some discussions of these issues on the LCHC web page.

**EJOP**: Your work also dealt with several important methodological aspects of psychology as a discipline, many of them prompted by your original dissatisfaction with more 'mainstream' methods and approaches, including methodologies specific for cross-cultural psychology. Some time ago you came to discuss the need for a 'cultural-genetic methodology'. What are the essential aspects of this kind of methodology and how is it put in practice?

**Michael Cole**: This question goes to the heart of my current work. In 1981 we created our first model system, influenced in important ways be Leontiev, Luria, and Vygotsky. As a result of that work we were able to obtain support to study the implementation of a theoretically organized teaching/learning activity that was part of a "microsocial world" or "idioculture" with its own norms, values, rituals, and all the ingredients of an activity system or cultural practice.

Since that time we have been studying learning and development of children and college students engaging each other in the multiple activities that constituted what we called "The Fifth Dimension." Our goal was to implement an activity system that would allow us to study cultural-historical genesis (change in the 5<sup>th</sup> Dimension), ontogenesis, and micro-genesis all in the same place. I called it a "meso" genetic method, playing on the fact that we were picking a period of time that spanned years but which a single person could experience over its whole history. Most important, we adopted the ethnographic method of fixing our interpretations of significant events at different levels of analysis in frequent fieldnotes written by different participants as well as tape recordings of pivotal meetings and narratives of people's involvements from their own point of view.

While the 5<sup>th</sup> Dimension continues to exist in a plethora of culturally useful forms, we have moved our own research on to an analysis of the process of activity formation. This work, which takes place as part of a 5<sup>th</sup> Dimension-like activity in a federally subsidize housing project, has been combining actor network theory, social representation theory, CHAT, and our locally famous Distributed Cognition approach pioneered by Edwin Hutchins to account not only for the formation of new black boxes (in our case, multi-media, educationally relevant, imaginative world building) and the subsequent changes that occur in the activity when it migrates to new sociocultural ecologies.

This work also affords me the ability to follow Luria's path by engaging in a "Romantic" science of human development. We continue to use all of the theoretical material tools at our disposal to guide the design of activities we create and study. But we also involve ourselves in the everyday lives of the children, youth, and adults who frequent the center where our activities take place. In this enterprise, distinctions between clinical and experimental, basic and applied, theoretical and empirical science disappear. We are enabled to develop ourselves by participating in the development of others, with all sides being free to decide for themselves "which way is up."

**EJOP**: A great part of your work has dealt with interventions, particularly working with children and youth to optimize learning and cognitive development. This resonates greatly with some of the initial aims of the Russian scholars and their interest in studying the 'zone of proximal development' for very practical and applied purposes. Based on examples from your work, what are the main steps to be followed in intervention programs such as the 5<sup>th</sup> Dimension? What is the basic 'design' and how successful are educational interventions of 'cultural-historical inspiration'?

**Michael Cole**: I view a 5<sup>th</sup> Dimension or a system constructed on similar principles as a "Zone of Proximal Development." That is a design feature. You cannot make development happen. You can arrange for it to happen. Your ability to design the conditions that encourage such development has long been recognized as the central criterion of the validity of one's theory. Since each such activity is in fact co-constituted with *its* cultural ecology, the only thing one can be sure of in such work is that one will have ample opportunities to go back to improving theory in a manner that incorporates so-called "contextual effects" into the activity in question. Just as there is not text without its "con-text" there is no activity with its con-activities. No end of theoretical repair work is entailed by recognition of this basic fact.

**EJOP**: Is CHAT a branch of cultural psychology and is cultural psychology a branch of general psychology like abnormal psychology or developmental psychology?

**Michael Cole**: In principle, the answer is no. CHAT is in fact a meta-psychological intellectual enterprise. It had its beginnings in psychology, perhaps, but it has already become used in a variety of other identifiable disciplines and different branches on the tree of cultural psychology. It is now common, for example, to see Vygotsky cited in articles form experimental social psychology, anthropology, sociology, literature, and so on.

I see no point in claiming that everyone else is a player in one's own game. People will treat the work we do as "applied psychology" or "community psychology" or service learning, or any number of other pigeon holes that suit their world view. As hard as it is, the interdisciplinary road, the road that requires synthesis across historically separate discourses is the only road to more comprehensive understanding that I can see. Having experienced the incoherence that can come with interdisciplinarity, I am not a romantic on this score. My one strategy, which plays into my romantic streak, for solving the problems of interdisciplinary incoherence is to choose problems for analysis that cry out for contributions from many academic disciplines, problems that can be found in an accessible location near a university. The real world problems that are the pre-text for working together become the real conditions for creating a new text, allowing access to the problem of culture and development in a productive manner.

**EJOP**: Finally, I would like to ask you to end with some thoughts for our readers. Many of them are graduate students or young academics or researchers, at the beginning of their career. From the perspective of a scientist with decades of experience in the academia and in diverse fields of research, what would be your advice for those just

getting started on the journey towards a better understanding of human beings and their socio-cultural contexts?

**Michael Cole**: The current generation faces huge obstacles to making a living in academia. Runaway neo-liberal Capitalism (even with a red star as its emblem) is commodifying everything in sight. My advice is to seek to ply your trade in an interdisciplinary, problem-based line of work. If you can do this as an academic, great. But the academia of today is far from the rarified academic of story books and popular culture films. It is very difficult for my younger colleagues to find the circumstances for both teaching and doing research that is community based and meant to last a long time. Various hybrid organization are arising to bring about the kinds of interdisciplinary research I have been advocating. This is happening in my university through creation of programs that combine social sciences and medicine, arts and science education, technology and education across the board, and more.

I warmly recommend the autobiography of Alexander Luria as a model of how a theorist who espouses the beliefs summarized above can continue to do his/her work under a huge range of circumstances. And Luria's circumstances were a good deal more threatening (and varied!) than any one of us is likely to encounter. All the world was a laboratory for Luria. And so it is.