

The influence of the ideas of L.S. Vygotsky and J. Piaget on modern research of development problem

Anne-Nelly Perret-Clermont & Jean-François Perret

University of Neuchâtel, Switzerland in collaboration with Valérie Tartas

University of Toulouse Jean-Jaurès, France (Switzerland)

anne-nelly.perret-clermont@unine.ch;

jean-francois.perret@unine.ch; valerie.tartas@univ-tlse2.fr

We will first start with a consideration of the tremendous impact that L.S. Vygotsky and J. Piaget still have on research studies. For this we will rely on available on-line information with some quantitative indicators. We will then turn to the second part of our talk, which is dedicated to the consideration of how fortunate modern day psychologists are to step on the shoulders of such giants to further pursue fruitful lines of inquiries into the processes that favor human development. We will provide an example drawn from our own studies in Neuchâtel and Toulouse.

L.S. Vygotsky and J. Piaget have been – and still are on the day of the celebration of their 120th birthdays! – major figures for researchers in psychology and education. Born in the same year but in distant countries at a time when airplanes and the Internet were not available, they had known of each other since their early days as scientists. Piaget was working with Prof. Claparède, whose wife was Russian. Vygotsky published an early book of Piaget in Russian and commented on it in depth. As we know, in 1962 J. Piaget came back to these comments and stated how sad he was not to have been able to pursue the discussion with Vygotsky around their common interests. He was convinced that they had different perspectives that were in no way contradictory. Nowadays, in a time when the differences between these two authors have probably been over-emphasized, we would like to discuss the idea of how the originality of both of them still lies in their concern to understand the *processes* that allow for development of higher psychological functions, in contrast with other researchers who tend to confine themselves to the investigation of elementary psychological processes or to “snapshot” descriptions of competencies in different phases of infancy without accounting for their progressive transformations. We are well aware that Vygotsky and Piaget were not isolated thinkers and that their own development was supported by on-going discussions with other scientists in their communities (Perret-Clermont & Barrelet, 2008/2014). But the present symposium is dedicated to the celebration of our two authors and we will concentrate on them.

The echoes of Vygotsky and Piaget in current studies are ever growing. It is difficult to say, at least at first, if this is due to the increased availability of their texts (because of electronic communication, translations and an upsurge in the number of researchers in the world) or to increased interest in their work. Most probably these are connected phenomena. To build an image of

this ever-growing reception of their works it is necessary to take into account not only their articles but also their books. Surprisingly, nowadays, in spite of the tradition of books playing a major role in philosophy and human sciences for an in-depth understanding of matters, data bases for scientific research, such as those of Scopus or Thompson-Reuters, record only articles and not books. Therefore, the present account will be based on Google scholar, an interesting tool because it also considers many languages of publication and translations. Of course, technical developments in "big data" will make it possible in the near future to obtain much more refined bibliometrical results than those that can be offered here. Yet, there are several questions that we can already address with interesting results. They allow us to sketch a "big picture" of Vygotsky and Piaget in modern research for the period between their 100th and 120th anniversaries (1996–2016).

Who cites Vygotsky? Piaget? How many scholars in the world make explicit that these authors have nourished their thinking? Which texts are most cited? In which languages do they write? This talk will go into more detail, but let's first warn the audience: nobody can find in his or her life the time to read everything that has been published by the successors of these two giants! Of course, not all the citations have the same importance or quality. Some are only allusions or superficial references to a concept. Some citations serve to qualify the line of research (almost the sub discipline) to which the researcher claims to belong: it then becomes an identity marker. Others comment on one point or another of these theories or make reference to Vygotsky or Piaget as an authority argument in favor of their point. More ambitiously, some authors try to apply these theories to educational proposals and their critical analyses. Finally, even more enterprising scholars suggest ways to expand Vygotsky or Piaget's proposals to address new issues and thereby further the theoretical and empirical work along new avenues.

It is interesting to examine who cites both Vygotsky and Piaget and to consider which elements are discussed when attention is paid to both authors simultaneously. Roughly a third of the texts of these writers want to identify the resemblances and differences between the two theories among which quite a few refer to Vygotsky's criticisms of Piaget, as published in the 1962 American translation. Many other citations comprise educational proposals inspired by these two psychologists. But probably present developmental psychology has not fully exploited yet the complementary methodological and conceptual contributions of Piaget and Vygotsky. There are still many new frontiers to explore in spite of major authors like Jerome Bruner or Liudmila Obukova, who have paved the way in this direction.

In the second part of the talk, we will revisit two of Piaget and Vygotsky's major methodological contributions to better understand developmental change. We will then present our on-going efforts to help advance them with Valérie Tartas (Tartas & Perret-Clermont, 2008; Tartas, Baucal & Perret-Clermont, 2010 and in press).

In re-reading Piaget and Vygotsky, we are particularly interested in setting the central question of the relationships between the individual and the social in the light of the worries and hopes of these authors as people of their times. Jean Piaget, as a young man, was vividly confronted with mass movements, strikes, World War I and the fear of communism. He was also educated as a Protestant Christian with a high sense of personal responsibility and an acute sense of the importance of a critical look at non-argumentative dogmatic assertions. As a result, Piaget wanted to engage in understanding and promoting personal autonomy and cognitive ability, to not be dependent on others' ideological thinking. In his studies, he therefore gave priority to the observation of the subject's own actions, reflections and meta-reflections. Nevertheless, he often mentioned the role of social interactions. To some extent he also mentioned the role of cultural transmissions. But living in a conservative society with very clear hierarchies, Piaget was very concerned that these social transmissions not be imposed top down on the individual but critically discussed. At the same time, but at the other end of Europe, in a completely different political context, Lev Vygotsky was born into a Jewish cultural context that considered asking questions to others a vital source of knowledge. Vygotsky then experienced Russia's post-Revolution period with the deep commitment that a renewed social context should foster the development of all children, whatever their eventual defects. Schools, culture and science were seen as very important resources for the development of higher psychological functions. But in spite of this priority given to culture and social coordination, Vygotsky granted an essential role to the individual person. For instance, in his *Psychology of Art*, Vygotsky describes how teachers cannot make important psychological experiences happen to children but only be the coach who renders it possible. It is the individual who actively responds. Looking at a piece of art requires a personal creative act.

In present times, we also have our own commitments that make psychological research relevant to us. Culture and science are very essential resources. But at the dawn of the 21st century we have a greater degree of uncertainty as to the characteristics of the skills and knowledge that can help solve our major problem – the survival of humanity – in the face of climate change and other environmental, technical and social changes. Societies have become more complex and more dangerous. Interiorization of the knowledge and culture of previous generations does not seem sufficient. Individuals need to grow stronger as persons to be able to meet the demands of a more complex society globalized into a mix of multiple technological, social, linguistic and cultural networks. What is the direction of the line of development? The question has to remain open-ended and research should not forget that socio-material arrangements are very important to take into account (Perret & Perret-Clermont, 2011; Latour, 2015; Iannaccone, 2015; Kontopodis & Perret-Clermont, 2016).

To illustrate how to work in this direction, we will propose a methodological approach that is both inspired by Piaget and Inhelder's studies of the development of cognitive operations and by Vygotsky's suggestion to provoke development in order to observe it. The research designs invites children to conduct several activities in different socio-material settings, moving from one to another. We then observe how they engage in these activities, learn from their partners (adults and children) and transfer – or not – their gained understanding and the organization of their social relations from one situation to the other. In so doing, we pay attention to the micro-genetic processes related by Piaget and Inhelder (Bronckart, 2013), but we reinterpret them as micro-historical changes in the individuals within framed and situated social material settings.