This research project was abandoned due to the author's declining health.

The role of trust and expertise in opinion formation

Whether you are the editor of a scientific journal or an apprentice hairdresser, we all rely on the advice of people we trust when making judgments on issues outside the scope of our personal experience. This is well known (Blume, 2006; ALLEA 2018). It is also well-known that our world has seen a crisis in trust over the past 50 years (Beck, 1986; Fukuyama, 1995).

But do those we do trust themselves have the expertise to give us good advice? And whom do we trust for specific kinds of advice? How do judgments of trustworthiness and expertise interact? Although as infants we generally place implicit trust in our parents, by the time we leave school, we have generally formed commitments and relations of trust which are beyond the control of our family, and these new commitments will shape how our views develop into the future. (Vygotsky, 1934b/1996; Leontyev, 1978). The interaction between trust and expertise in the decisions of individuals is what determines the shape of the community-wide trust networks which are the site of significant social pathologies at the present juncture (ALLEA 2018; Boven 2018; Falcone & Castelfranchi 2007).

What we want to understand is how, during that crucial period of development in the middle years of secondary school, we first establish the relations of expert-trust which will support our judgments, above all our judgments of trustworthiness and expertise themselves, into the future. Under what conditions would, for example, an expert explanation of an issue overturn a person's belief which had been formed on the advice of a respected peer? And vice versa.

Teachers are aware that their students live in a world saturated with conflicting and unreliable sources of information and it is not sufficient to just teach content – they have to teach their students how to interrogate the sources they meet in the world outside the classroom. Research shows however that neither the internet nor recognised experts are decisive in how people make decisions, for example, about their health; rather it is the advice of peers, whose trustworthiness is validated in personal interaction, which is decisive (Blume, 2006).

This project will use Cultural Historical Activity Theory (CHAT), to develop the study on the basis that a person's commitments form a structure closely linked to their social situation (Vasilyuk, 1984). Although it is well-known that what a person already believes prejudices their judgments of new information they receive and of the sources of that information, CHAT directs us to focus on the formation of these commitments, rather than the final product (Vygotsky, 1934a) as reflected, for example, in opinion surveys. The 'germ cell' (Blunden, 2017) of this process of opinion formation is a person judging a text, mediated by another person whose advice is more or less trusted and more or less expert.

The Project

This problem can only be investigated with close attention to ecological validity (Cole 1996). That is, it is necessary that subjects take advice on the relevant questions just as they do in ordinary life, free of persuasion or influence by the researcher. However, it is likely that the subjects will, as a result of participation in the research, become sensitised to the reliability or otherwise of advice provided by a source whom they deem to be trustworthy.

Confirmation bias is well studied (This American Life, 2017; Boven et al, 2018) but what is less well known is how the 'bias' itself is formed. Consequently, it is crucial to study opinion in formation, before prejudices have become consolidated.

The proposed research project will track how year 10 school students form and change their opinions on questions which lie outside their personal experience as they seek and receive advice from a series of different sources:

- their own family
- their peers at school
- their own research on the internet

- an expert who speaks to the class in person
- a whole of class mediated discussion which aims to reach consensus.

The project will rely on the support and collaboration of a selected teacher who may be recognised as co-author of the resulting publication. The issues used to track subjects' opinions will be selected with the advice of the class teacher, but will be in the general area of science and society, issues bearing on public policy which are to some extent genuinely lacking in clear right/wrong answers.

The project will include lessons developed in collaboration with the participating class teacher, where students are encouraged to express their own opinion on the topic. Discussion will focus on where each student had advice in forming their opinion, so that students are sensitised to the influence of another - a friend, a website, a teacher or whatever – in making their judgment.

The project will also include lessons in which the class is given the opportunity to hear from an expert on the topic in the flesh, and reflect on whether their opinion has been changed. In all lessons, an assessment task will be developed in collaboration with the teacher, thus ensuring that the school's learning goals are contributed to by participation in the research.

A second phase of the research will entail zoom meetings between the researcher and selected of students in which the student's opinion on issues will be tracked over a period of time as they are invited to seek advice from various directions consonant with their own social situation.

A third phase will entail report backs on these zoom meetings at 6 monthly intervals to track changes in opinion longitudinally.

Summary

The research will report on whose advice the subjects trust when assessing claims and the extent to which this trust is correlated with expertise in the relevant questions.

References

ALLEA (All European Academies) (2018). *Science in Times of Challenged Trust and Expertise*. Proceedings.

Beck, U. (1986). *Risk Society. Towards a new modernity*. London, UK: Sage.

Blume, S. (2006). Anti-Vaccination movements and their interpretations. *Social Science & Medicine 62*(3), Elsevier.

Blunden, A. (2017). The germ cell of Vygotsky's science, in *Vygotsky and Marx: Toward a Marxist psychology*, ed. C. Ratner et al., Routledge.

Boven, L. Van , Phillip J. Ehret, P.J. & Sherman, D.K. (2018). Psychological Barriers to Bipartisan Public Support for Climate Policy. *Perspectives on Psychological Science Vol. 13*(4).

Cole, M., (1996) *Cultural Psychology. A Once and Future Discipline*, Cambridge, MA: Harvard University Press.

Fukuyama. F. (1995). *Trust*. Simon & Shuster.

Leontyev, A.N. (1978). *Activity, Consciousness and Personality*. Moscow: Progress Publishers.

This American Life (2017). *The Incredible Rarity of Changing One's Mind*. presented by Ira Glass. https://www.thisamericanlife.org/555/transcript

Vasilyuk, F.E. (1988/1984). *The psychology of experiencing. The resolution of life's critical situations*. Progress Publishers Moscow. English translation (1988), Hemel Hempstead, UK: Harvester-Wheatsheaf.

Vygotsky, L.S. (1934a/1987). Thinking and Speech. *LSV CW vol. 1*, 39–285. New York: Plenum Press.

Vygotsky, L.S. (1934b/1996). Chapter 6. The Problem of Age. *LSV CW, vol. 6*. Plenum Press.