

Cole's 'Cross-Cultural and Historical Perspectives on the Developmental Consequences of Education'

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This article is the work of a master at the top of his game. For decades Michael Cole has been one of the world's leading scholars on how literacy, education, and development are related, so it is perhaps to be expected that he can go through these issues with such insight. Evoking more wonder, however, is the enthusiasm he still manages to bring to the task after decades of work.

For all the complaints we hear about ineffective schools, it is important to remember that they have consistently been shown to have a powerful impact on human mental and social life. This impact has been documented in numerous ways over the years; indeed it is one of the few examples we have in social science of a genuinely robust finding.

Cole provides a big picture of these issues. He does so by bringing to the task a powerful interdisciplinary framework, and he wields this framework expertly on the way to imparting one insight after another. One of the talents he has displayed throughout his career is the ability to invoke a broad range of perspectives with facility in order to take on complex issues, all the while avoiding the temptations and pitfalls of oversimplification.

My goal in what follows is not to comment on all the points Cole raises. Indeed, neither I nor anyone else but Cole has the ability to provide such a broad commentary. Instead, I wish to focus on a couple of issues in an attempt to elaborate them and raise further questions.

I begin with Cole's section on 'The Consequences of Schooling in Post-Colonial Societies.' It is perhaps easiest to see the consequences of schooling in societies as they undergo rapid change, but analysts such as Ernest Gellner [1983] have argued that understanding the consequences of schooling is the key to understanding *any* modern society. In an analysis of the history of Western nation build-

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ing, Gellner reformulated Max Weber's classic definition of the state as the agency within society that possesses the monopoly of legitimate violence in light of how central education has become in the modern world. In Gellner's account: 'At the base of the modern social order stands not the executioner but the professor. Not the guillotine, but the (aptly named) doctorate d'état is the main tool and symbol of state power. The monopoly of legitimate education is now more important, more central than the monopoly of legitimate violence' [Gellner, 1983, p. 34].

So what are the consequences of schooling that are so important and how do they operate? Do they make us more intelligent? Or perhaps less so, at least in some senses? These are the sorts of questions that Cole struggles with in this and many other of his publications.

I use the term 'struggle' here with something specific in mind because the language Cole employs to make his points does not always lend itself easily to his purposes. Although he clearly sets out with certain well-defined aims, I believe that the meaning and implications of his terminology sometimes seem to get in the way.

For example, in the section on 'The Consequences of Schooling in Post-Colonial Societies,' Cole addresses issues of 'Empirical Evidence.' There he dips into his early work with Gay, Glick, and Sharp and revisits the finding that 'schooling sensitizes children to the abstract, categorical meanings of words, in addition to building up their general knowledge.' A bit further on in this same section he raises a seeming contradiction to what he has just argued. This contradiction emerges when he feels compelled to note that 'it is not plausible to believe that word meaning fails to develop in children who have not attended school.' Cole backs this up by noting:

The nonliterate Mayan farmers studied by Sharp and his colleagues knew perfectly well that ducks are a kind of fowl. Although they did not refer to this fact in the artificial circumstances of the free-association task, they readily displayed awareness of it when they talked about the kinds of animals their families kept and the prices different categories brought at the market. Similarly, when the materials to be remembered were part of a locally meaningful setting, such as a folk story or when objects are placed in a diorama of the subjects' town, the effects of schooling on memory performance disappear (p. 124).

Why is it that Cole feels the need to say that schooling clearly has some impact on people's understanding of word meaning while, at the same time, state that non-literate people understand the meanings of words perfectly well? Cole has traditionally dealt with this seeming contradiction by examining how particular contexts influence people's performance on cognitive tasks – precisely the point of the last sentence in the preceding quote. Through ingenious, ethnographically grounded analyses, he has been able to document that people who do not demonstrate a particular cognitive ability in one setting do show evidence of having it in another.

This is certainly part of the story, and over the decades Cole has brilliantly and consistently demonstrated how misleading many of our assessments of cognitive abilities have been because they fail to appreciate the implications of his line of reasoning. Time and again, he has found that people who have been examined in one context and judged incapable of carrying out some cognitive task have demonstrated what appears to be that very ability when the context is changed – sometimes in seemingly minor and irrelevant ways.

The beauty in all this is that it has added an important dimension to our notion of cognitive abilities. The danger in it, on the other hand, is that it can tempt us to assume that when subjects fail to demonstrate an ability to carry out some task, we have just not been clever enough in finding the right context in which to assess them. The abilities seem to be ‘there,’ somewhere in the individual, and the task of the investigator is to make it manifest. Among other things, this makes it tempting to minimize individual and group differences, attributing them to being a function of context.

What I would like to propose is another perspective on these issues, one that does not contradict Cole’s so much as complement it – and hopefully extend it as well. Specifically, it seems to me that some of the findings he has reported over the years are best approached in terms of activating, or taking advantage of the diverse ‘semiotic potentials’ [Wertsch, 1985] to be found in any human language. On the one hand, language can be used to refer to and predicate about nonlinguistic reality. From this perspective, the fact that ‘nonliterate Mayan farmers ... knew perfectly well that ducks are a kind of fowl’ is reflected in the fact that they could refer to ducks by using either the term ‘fowl’ or ‘duck.’ Linguistic terms are being used in this case to refer to objects in a nonlinguistic reality.

But there are other semiotic potentials of language, and one of them comes into being through the ‘literacy practices’ [Scriber & Cole, 1981] found in Western-style schooling and literacy training. This is a use of language to talk about language. Instead of using language to refer to nonlinguistic objects, it is now used to refer to a sort of ‘second reality’ made up of objects that are themselves linguistic in nature. This represents a semiotic potential that is readily available in any human language, but is used and mastered first and foremost in children’s development in the context of formal schooling. It is usually only this context that people start to confront questions like ‘Are all ducks fowl?’ and ‘Are all fowl ducks?’ questions that have to do with abstract dictionary definitions of ‘sign types’ [Wertsch, 1985].

It is in this second reality of abstract sign meaning that we can speak of relationships of synonymy, antonymy, hyponymy (‘duck’ is a hyponym of ‘fowl’), and the like. These are relationships that exist and can be discussed while operating strictly within the confines of the second reality of linguistic objects. This is so even if we have never encountered the nonlinguistic objects at issue, indeed even if the nonlinguistic objects at issue are known not to exist. Consider, for example, discussions of hypothetical objects such as a round square.

The point here is that different notions of word meaning, including some assumptions about a progression or hierarchy of word meaning, are floating around in discussions on the cognitive consequence of schooling and complications arise if we do not sort them out. To be sure, issues of how various contexts influence performance on test items are relevant here, and in that sense Cole’s longstanding critique and analysis have been right on target. On the other hand, however, there is an important sense in which there *are* important individual and group differences in the ability to function in these different contexts.

In my view, such difference can be productively discussed in terms of the mastery that individuals have in engaging in what Ludwig Wittgenstein [1953] called a ‘language game’ or Mikhail Bakhtin [1986] termed a ‘speech genre.’ It turns out to be extremely easy to generate bogus arguments about whether an individual ‘really’ understands a term or expression if one does not specify the language game or

speech genre in which the term is being used. For example, it is one thing to use a term like 'duck' flawlessly when referring to the nonlinguistic object of a duck. This is one – indeed what many would call *the* – primordial-language game, and if someone has not mastered it, we would be tempted to say that they simply did not know the language.

On the other hand, there are numerous cases in which we can find someone who uses language appropriately to refer to nonlinguistic objects but may not be able or willing to play language games involving the second reality mentioned above. As I have argued elsewhere [Wertsch, 1985] and as I think some of the studies by Sylvia Scribner [1977] show, the issue here may not be so much one of an *inability* to use this language game involving abstract, decontextualized linguistic objects as an *unwillingness* to engage in it. Regardless of whether we view it as an issue of ability or one of willingness, the point is that there are stable individual and group differences in this regard. In the end this takes us back to Cole's line of reasoning about the power of education and schooling to shape cognitive abilities – or what might be called 'cognitive preferences.'

From this perspective, one of the things that schooling does is encourage students to develop the mastery of certain speech genres, namely those that operate in the realm of abstract, decontextualized word meanings. This is a point whose implications become clear only when we keep in mind that the central unit of analysis involves an irreducible tension between active agent and cultural tools such as language. What counts as intelligence and school achievement from this perspective is the ability, and often the willingness or even preference, to use language in particular ways. The reason for optimism in this regard is that the particular semiotic potentials that are privileged in a setting like formal schooling are available to everyone. The reason for concern is that not everyone is encouraged to undertake the hard work required to become truly facile in using this semiotic potential.

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