

MATERIALISM AND KNOWLEDGE

What Materialism Is

Materialism says that ideas, thinking, and ideals are parts of material reality that are created by human beings in processes that take place in their brains. Materialism says that ideas result from people's interaction with each other and with other material things in nature and society. Although thinking influences reality when it directs human activity, material reality has a much bigger effect on thinking than thinking has on the rest of reality. This is the central idea of materialism.

What Idealism Is

Idealism means opposing materialism in various ways. Some idealists say that there are non-material beings, like gods or ghosts, that can think. Other idealists claim that some kinds of thinking affect reality directly, so that thinking about the world differently or believing different theories about it makes the world different. Still other idealists see brains as producing correct ideas all by themselves, without extensive interaction with the rest of the world.

In this column and the next one, we will discuss some of the specific ways that material reality affects thinking more than the other way around. We will discuss the materialist philosophy of how people discover true ideas and learn, why false ideology is dominant under capitalism, and the relation between communist political ideas and the contradictions of capitalist society. In this column we discuss the materialist philosophy of how people learn.

Materialist Theory of Knowledge

Perhaps the most basic way in which thinking depends on material reality is this: Thoughts have not always existed, but only became possible when animals with brains evolved, which happened a very long time after the beginning of the universe. Thinking has only been raised to a higher level through biological

evolution of modern humans and their production of their own historical development. But thinking still depends on material reality every day, in discovering knowledge and in learning.

As we discussed in previous columns, all knowledge derives from practical activity. As Fredrick Engels put it, "the most essential and immediate basis of human thought" isn't nature itself but "the alteration of nature by people." This is the materialist view of knowledge. People's ideas derive from what we do as we interact with the part of reality that those ideas are about. People are not just born with correct ideas about the world and correct these ideas don't grow in brains by themselves.

Idealist Theories of Knowledge

Idealists deny this. Some idealists claim that important knowledge is built into human brains, like linguist Noam Chomsky's theory of "innate ideas." Others claim that knowledge about the world depends very little on practice, but is deduced by a few "geniuses" with special brains. This idealist view doesn't even work for the most theoretical kinds of knowledge. Most new laws of physics, for example, are discovered by experiments and could not be deduced from previously known principles.

How People Learn

Learning things that are already known by other people also shows the materialist approach is correct. No one would think you can learn to fix cars, play sports, or be a political organizer without practice in that specific activity. But the same is true when you learn theoretical knowledge. To understand concepts and see how they work, people have to work their way through specific examples. Examples are not only essential for understanding, but are also important tests of ideas. If someone makes a general claim that might be wrong, discussing examples is an important way to check it.

Idealism Makes Learning Harder

Idealist theories of learning are not just false, they do a lot of damage. Psychological research shows that kids learn better in school when they understand that practice and effort are what counts, not some special kind of brain (see *Scientific American Mind*, 11/28/07).

Certainly people learn different things at different speeds, depending, for example, on whether they already know how to learn a specific subject. But the general method is the same: getting particular cases right, often after first getting them wrong and learning from mistakes.

The Dialectical Relation of Thought and Reality

Learning is one important example of the materialist pattern of the relation of thought to the rest of reality. We can describe this as a "dialectical relation with a dominant side." Thinking and reality are opposites that influence each other, but reality is the dominant side. We will discuss this more in a future article.

SOME CONCRETE EXAMPLES:

What you spend most of your time doing is what you get good at. The Tuhamara in Mexico are the fastest runners in the world. Why? Because they run everywhere! Why are a lot of kids good at soccer or basketball but not so good at reading? Because they spend all their spare time playing ball. The main way to be a better reader is to read. Anything. Just read, you'll be a better reader.

Anybody who's ever watched a baby learn to walk knows that it's fall down, get up, fall down, get up, over and over again. The same goes for skaters...ask anybody with a skate board.

Practice, effort, try and try again, that's how everybody learns.