Critical Thinking – Assumptions

How do we get the premises in an argument in the first place? There are lots of sources, but not all premises require further justification. Sometimes we simply agree to an assumed premise.

What kinds of assumptions do we make in our everyday lives?

- We drive through a green light because we assume that the other drivers at the red light will stop. (If we refused to make that assumption and stopped every time to check, we would get rear-ended by the cars following us).
- When I read a scientific report, I assume that the scientist has not deliberately faked the reported data. (If I felt I had to personally check all the results before I could profitably read a scientific report, I should certainly not read many.)
- When the weatherman reports a severe blizzard in Minneapolis, I assume that he is honestly reporting from reliable sources, and I assume that the accompanying video of Minnesotans under the snow was not taken in Anchorage during 1979.
- When scientists do research, they operate from many givens that are not brought into question by that particular research project. Research on lasers, for example, might make use of our knowledge of the speed of light – without testing what we believe to be the actual speed of light (Of course, if the research goes badly, one might then critically examine the underlying assumptions.

Consider this argument:

We should ban the manufacture and sale of lead-based paints. For think about what happens when you paint your house or apartment. You paint over the paint that was there, and eventually your paint is painted over until the result is a thick coat of lead-based paint that ultimately begins to peel and flake. The small children in the house pick at the paint, then put their fingers – or even flakes of paint – into their mouths. Through these and other events, a substantial portion of the lead may ultimately end up in the children, and thus in their bloodstream. And when that happens, the children suffer from lead poisoning, which may cause mental retardation, nervous disorders, blindness, and even death. Therefore, lead-based paints should be banned.

What is a basic unstated assumption in this argument?