

arguments occur between and among individuals in the legal profession, among scientists, among physicians, and among engineers. To have a voice in debates in these technical communities, the participants must share extensive knowledge about their subjects as well as a precise vocabulary necessary to communicate about technical concepts.

Individuals engaged in scientific fields are frequently embroiled in technical arguments ranging from the elements of string theory to the causes of global warming. In some cases, the issue may be important only to the particular scientific community involved; in other instances, the argument may have importance to the larger social community. For example, arguments about the finer points of string theory are more interesting to quantum physicists than to our society at large. Other issues raised in a technical community become so important that the public community must address them. The causes and consequences of global warming, for instance, are such issues. Arguments about global warming have moved from the scientific community to the public sphere.

In each of these spheres—personal and technical—the debates engage a limited audience. In the personal sphere only a limited number of people know the issues or are invested in the debate. In the technical sphere only the limited technical community is engaged. Our interests lie in the public sphere where a much larger audience may be involved.

DEBATE IN THE PUBLIC SPHERE

Debate in public arenas occurs among citizens and among those selected to govern. As such, debate is an essential activity in democratic societies. Citizens coming together to argue in a variety of venues are the essence of a democratic society. In some cases, citizens argue directly—for instance, when they write letters to newspapers advocating an action or when they call on their representatives to enact a specific policy. For several centuries in Western democratic cultures, public argument has occurred in various government bodies, including legislatures, councils, and town hall meetings.

More than 2,000 years ago, when democracy first arose and took root in Athens, male citizens met regularly in public assemblies; their votes determined the policies and actions of their state. Not only did a group of teachers, called “sophists,” educate Greek citizens about the importance of advocacy to the city-state, they also taught practical skills of advocacy. Athenians used these skills to determine if Athens should go to war, and, if so, how it should fight; they also used these skills to decide which laws to enact and what policies should control the course of daily life. These votes were always preceded by debate: citizens and leaders argued about what was morally and legally right; they argued about the best way to achieve desired outcomes; they argued about what was possible and what was prudent. All voices were important in arriving at the best choice through social discourse.

Borrowing from the Greeks, the ancient Romans also used debate and advocacy to weigh the merits and drawbacks of issues affecting them. Thus, the Greeks and Romans laid the foundation for the modern democratic process practiced in a variety of forms around the globe.