

theories about the beginning of the universe ordinarily direct their arguments to other cosmologists because the arguments are so technical that a general audience cannot understand them. Stephen Hawking's *Brief History of Time* is perhaps the exception that proves the rule. Hawking's decision to present his arguments to a public audience, made in part because of his need to finance his children's education, was not a decision the community of physicists supported. They believed Hawking's explanations were insufficient—in part because he spoke to a general audience and therefore abandoned the technical language necessary to precisely and accurately capture the complexity of the scientific arguments. Cosmologists' responses to Hawking's publications demonstrate the limited scope of debate in the technical sphere.

The audience for public debate is a general rather than technical one. This general audience is one of democratic decision making wherein politicians must appeal to their constituencies for various causes as well as for their own reelection. At their worst, political appeals are based on and directed toward selfish interests, advocating for the needs of special interest groups or those who have the deepest financial pockets. At their best, these appeals seek to discover and promote common interests and values of the electorate, that is, the universal audience.

Excellence in public debate is achieved by speaking to a universal audience. A universal audience is not one that appreciates only those values cherished by all or those advocated by specialized groups; a universal audience is conceptualized as composed of "reasonable and competent people."¹ Although this definition is useful, it doesn't tell us what constitutes "reasonable and competent people." Who defines "reasonable"? What does "competent" mean? Debaters continually ask these questions and provide their own best answers as they construct their arguments. Those who engage in public debate have at least a general sense that more people than not are "reasonable and competent" and that democratic discourse assumes reasonable people have the right to a voice in the decisions that affect their lives.

The danger of embracing public debate is the risk of addressing arguments to nonspecialists. Even reasonable and competent citizens may not possess the knowledge needed to judge all elements of technical questions involved in energy, the environment, defense, medicine, etc. Just as dangerous, citizens may believe they do have specialized knowledge and may be persuaded by specious arguments. These dangers are the costs citizens of democracies incur to avoid turning decisions over to dictators. Public debaters must keep such issues in mind when making decisions about how to adapt and present their arguments to general audiences.

EVIDENCE

Evidence is the starting point of argument. To convince an audience to accept their position on an issue (which we will call a claim), debaters begin with evidence that the audience finds acceptable. They can then create a link between that evidence and the claim being made in an attempt to convince the audience to believe in the claim as well. Because evidence is the starting point of any argument, it is an essential part of argumentation and debate.

In public arenas, evidence begins with the audience's knowledge. The debater uses it as a starting point and then moves to the position or a claim that she