Before the 11th of September, I had been trying to frame some thoughts about the humanities and social sciences at Duke.

I am an enthusiastic advocate of our strategic investments in science and engineering; I'm convinced that they are essential for Duke to become a truly world-class university, and even to remain a player in these crucial areas of human knowledge. But the provost, the deans and I surely do not want the humanities and the social sciences, which include fields that are already world-class at Duke, to lose hard-won excellence so that other disciplines might be brought to prominence.

You will not be surprised to hear that it proved difficult to say anything of substance in fifteen or twenty minutes about two entire divisions' worth of disciplines that countless scholars have spent their lifetimes studying and teaching, with several of the best of them in the audience. As I contemplated the task I had set myself, I felt rather like the man who survived the notorious Johnstown Flood in Pennsylvania, and dined out on stories about it all his life. He died and went to heaven and St. Peter told him that the rules of the place allowed each newcomer to address the assembled host on the first night in residence. So of course, the guy said, I'll talk about my experiences in the Johnstown Flood. St. Peter replied: "Do what you like, but do remember that Noah will be in the audience."

However, recent events have given my topic a clear focus, and a new urgency. Thus, to an audience liberally populated with Noahs, I'm going to talk about the humanities and the social sciences in light of what happened on September 11, 2001 and the weeks that have followed.

Let's think first about the questions that have engaged all of us in the wake of those attacks. Some are in the province of the physical sciences and engineering, to be sure: Why did the buildings implode, and would it even be possible to design buildings that would withstand this particular kind of attack? How does anthrax work on the human body, and what are the most effective ways to cure it?

But there is an entirely different range of questions we have been asking, with particular insistence, and all too frequently with despair.

Our deepest needs are for solace and comfort; in trying to come to terms with September 11, our first impulse was to reach out to the people we love. Some found refuge in religious faith, others in music or literature or art. Some found useful lessons in the history of the past, others in the works of a favorite philosopher.

And then there are the questions. Why would anyone act as the terrorists are acting? What leads them to hate us so much? How are their activities organized, directed and financed? How should we respond most effectively as a nation? How can we prevent such horrors from happening again?

In all these ways, we move instinctively onto the terrains of the humanities and social sciences. For those who are not familiar with the way either type of discipline actually does its work, let me step back for a moment to provide a context.

In the late 1970s, I served on a commission on The Humanities in American Life, chaired by Richard Lyman,
former president of Stanford and President of the Rockefeller Foundation. I recommend the first chapter of the report of that commission as still one of the best concise descriptions of what humanists aspire to do.

Let me quote just a few passages:

The humanities presume particular methods of expression and inquiry -- language, dialogue, reflection, imagination and metaphor. In the humanities the aims of these activities of mind are not geometric proof and quantitative measure, but rather insight, perspective, critical understanding and discrimination.

And again:

The humanities are an important measure of the values and aspirations of any society. Intensity and breadth in the perception of life and power and richness in the works of the imagination betoken a people alive as moral and aesthetic beings, citizens in the fullest sense. ... They are sensitive to beauty and aware of their cultural heritage. They can approach questions of value, no matter how complex, with intelligence and goodwill. They can use their scientific and technical achievements responsibly because they see the connections among science, technology and humanity.

And finally:

Study of the humanities makes distinctive marks on the mind: through history, the ability to disentangle and interpret complex human events; through literature and the arts, the ability to distinguish the deeply felt, the well wrought, and the continually engrossing from the shallow, the imitative, and the monotonous; through philosophy, the sharpening of criteria for moral decision and warrantable belief.

At this time we turn to history for some understanding of comparable patterns that might shed light on these events, even though the parallels are never perfect. Though no philosopher can fully explain why anyone would want to ram a jet full of people into a building and bring a horrible death to thousands of other people, philosophers can help us think more carefully about how moral decisions can and should be made, even in such difficult times.

Over the centuries those who profess other parts of the humanities have sustained a rich reservoir of works that now provide solace, engagement, perspectives on our world. These scholars have not only conserved these works, they have over time subjected them to the kind of critical attention that means we can turn to a few particularly excellent, or particularly well-beloved, works in troubled times. We do not have to sift back through several millennia of the products of the human mind in order to find those that have proved themselves of enduring value.

Of course the 'canon' thus constructed is not infallible. One of the most intriguing aspects of the humanities is the way the canon is continually refreshed, renewed, re-envisioned with each generation. But there are clearly works that are more richly crafted, more deeply felt, more continually engrossing, from any period of human history, any part of our globe, and these are the works the humanists preserve, interpret, and keep vigorous.

Languages, literature, history, the classics, religious studies and philosophy are the core of the humanities as traditionally defined; music and the visual and performing arts are crucial humanistic pursuits as well. For some of us, music is particularly powerful at times of great emotion and complexity. Anyone who was fortunate enough to hear the stirring performance of Mozart's *Requiem* and the serene *Adagio for Strings* of Samuel Barber in Duke Chapel on September 30 can certainly attest to that.

On September 15, an essay appeared in the *New York Times* by Bernard Holland, reflecting on how oddly
comforting it had been to come across a performance of a beloved Brahms symphony while channel-surfing on Tuesday the 11th. It was not, Holland made clear, that music represents good as against evil -- too many people who brought clear evil into the world have been connoisseurs of great music, as of art. It was more that, "for a moment," the Brahms symphony "fundamentally rearranged our minds," because of the beautiful and powerful ordering it brought in an immensely disordered time.

For others, favorite poems or plays or works of art serve the same purpose. Your chairman, Peter Burian, drew upon the familiar story of Oedipus in his deeply touching remarks at the community-wide vigil on September 12. At times such as these, we are made mindful of how much we owe our colleagues in the humanities and the arts, for creating, preserving, interpreting and teaching us these varied forms of human expression, efforts to capture meaning and find truth.

The Rockefeller commission back in the 70s was prompted by "a profound disquiet about the state of the humanities in our culture." This referred to uncertain financial support, diminishing interest among students in colleges and universities, eroding commitments to the humanities in secondary schools, and a lack of clear focus for the path ahead. Yet, as the director of the National Humanities Center, Bob Connor, points out in a recent essay, "Ironically, federal support for the humanities [through the National Endowment of the Humanities] peaked just as the Lyman report was being prepared for publication," and it's been downhill ever since, in real dollars.

The percentage of students who enroll in both the natural sciences and the humanities has continued to decline on many campuses, as students turn increasingly to majors that are perceived to have a higher career payoff. In that same twenty year period, the humanities have also been engaged in some fierce culture wars, or canon wars, that have generally produced more heat than light.

Yet there are hopeful signs. We seem to have come through the culture wars, with a truce if not a clear victory on any side, and humanists are guardedly optimistic about a period ahead that will offer opportunities for new theories, new paths of exploration. Support from a few private sources, including pre-eminently the Mellon Foundation and the Lilly Endowment, has given some cautious renewed hope on the funding front as well, although the situation is very far from that in the sciences and engineering.

At Duke, it is a particularly auspicious time for the humanities. The John Hope Franklin Institute is only the most visible of several initiatives that have given a new sense of purpose and optimism to these fields. The Institute is a series of interdisciplinary year-long topical seminars bringing together both scholars from Duke and visitors, along with graduate students.

As articulated by Dean Karla Holloway and Vice Provost Cathy Davidson, the Franklin Institute's purpose is to "make humanities central once again to intellectual life in the American academy and to America in general." The strategy for doing this is to bridge the gap between those humanists who believe the purpose of the humanities is "knowledge for its own sake," and those who believe in "knowledge for a social purpose," by synthesizing them in vigorous conversation. As they put it, "We want the most pressing, urgent, timely issues [issues such as race, religion and globalization] to be addressed from the deepest and fullest historical, comparative, and theoretical perspectives -- in other words, from a humanities perspective." They go on to say: "In moments of rupture and change [including moments of great scientific and technological advancement, as well as ruptures such as 11 September], one needs the humanities as a reminder of how to understand events, how to define ourselves as human." This thematic interdisciplinary emphasis reflects and builds upon some of the most exciting trends in the humanities not only at Duke but elsewhere.

Surely fluency in language, and familiarity with other cultures, have never been more important than they are today. These are areas where Duke has much to offer. Desperate calls have gone out from our government for
people who can speak the languages of those who have become our opponents or our uneasy allies; one hopes that the renewed visibility of language and culture will inspire students to take courses in these areas, and see them as intriguing opportunities for their own careers.

The Library, in many ways the home of the humanities and humanists at Duke as on any university campus, is flourishing, and has ambitious plans for renovation and expansion that will make it even more welcoming, and more useful, to scholars of all ages and all disciplines. Our active participation in the programs of the National Humanities Center right next door in the Research Triangle Park provides yet another dimension of creative opportunity for humanists at Duke. It is also a good time for the arts at Duke, with the Nasher Museum on the immediate horizon, and exciting ideas for expanding our capacities in the visual and performing arts.

The university will depend on, and must support, excellence in all these disciplines, in order to have within our grasp the interpretative frameworks that allow us to understand ourselves and others more deeply.

And what of the social sciences? The social sciences are contested terrain even in describing what it is that distinguishes them from other disciplines.

The best succinct definition I have seen is from a book called Science and the Social Order, published in 1952. Even this definition was cautious about not presuming too much. "One essential characteristic of the social sciences," it claims, "is that they deal with the social relations between human beings, that is, with those relationships between human beings in which they interact with one another, not as physical objects merely, but on the basis of mutually attributed meanings." Or from Karl Popper, a pre-eminent theorist by anybody's accounting, in 1948: "It is the main task of the theoretical social sciences to trace the unintended social repercussions of intentional human actions." Or more recently, from A New Dictionary of the Social Sciences (1979): social science "in the strict sense refers to the application of scientific methods to the study of the intricate and complex network of human relationships and the forms of organization designed to enable peoples to live together in societies."

And yet each of these definitions would be rejected by some scholars who are clear in their own mind that they are surely social scientists. The line dividing C.P. Snow's "two cultures" runs right through the middle of the social sciences. They are all subdivided into humanistic or scientific disciplines; there is no single separate "social science" methodology that can be identified as such. In each of the fields that we call by that name -- anthropology, psychology, economics, sociology, political science; and parts of history and philosophy as well -- many aspire to something like the quantitative rigor and law-like inferences of the natural sciences, and others practice an art of interpretation and narrative much closer to the humanities.

In some disciplines, such as economics, the great majority of adherents identify with the methods and habits of mind of the natural sciences, especially mathematics and physics; in others, such as anthropology, interpretation and narrative are recognized as central, and quantitative methods and the search for laws have less prominence. My own discipline of political science is roughly evenly divided along this fault line, and the intellectual battles that ensue are fierce indeed.

The most useful way to define the social sciences is not by our methods but by the problem-areas we have taken as our own. In general, social scientists study, and attempt to explain, social relationships among human beings -- whether through valid conditional inferences, historical or textual exegesis, game theoretic accounts, empirical generalizations, or any one of several forms of interpretation. The different disciplines attend to different types of relationships -- based in power, ceremony, exchange, scarce resources, kinship ties, regimes or legal systems-- and there is a good deal of overlapping of territory and mutual borrowing. Even those whose research is focused on the individual -- psychologists, for example -- study the development of the particular person in a world in which social relationships are crucial to that development; those who study cognitive
functioning in the sense of brain science are much closer to the natural scientists, with whom they keep increasingly close company.

Thus it is to social scientists that we turn with our most pressing questions in the aftermath of 11 September. What features of the lives of the terrorists -- their religious belief systems, psychological characteristics, economic deprivation, bonds of comradeship -- led them to undertake these acts? What kind of social or political system fosters or supports such behavior, and how can systems be built that will be more effective and more humane? How can we use our own governmental apparatus and control of force, along with those of our allies and the United Nations, to forestall further attacks? And how can we do this without catalyzing a powerful backlash that will undercut our efforts and lead to the deaths of thousands more, both here and abroad?

Under what kind of legal system, and in what kinds of courts, could the perpetrators of such acts be brought to justice? What kind of international system could be built that would render such events less likely? How do we balance appropriate security measures in our own country with due preservation of the civil liberties we rightly hold so dear?

As faculty in the Sanford Institute know well, social science is both abstract and applied, both objective and normative. We need to use contemporary events as crucibles to refine our theories about politics, our understanding of human psychology, our accounts of how religious faith can be deformed into fanaticism, our sense of the geopolitical balance of power, and our awareness of the consequences of the vastly unequal distribution of economic goods around the world. We need to learn more now about how people use technology, communications patterns, kinship ties in traditional societies -- dozens of the things that social scientists make it their business to try to understand.

With even greater urgency, we need some good immediate applications of what we already know, in government policies that serve the public interest. However contested our methods may be, however imperfect our knowledge, social scientists are nonetheless the best equipped of all of us to shed useful light on these complex events, and help avert new disasters.

At Duke, we have expertise in all the areas I have outlined above. There are ambitious plans underway to capture even more effectively the fine work that is being done in different departments and disciplines across the university. Interdisciplinary collaboration is robust in many areas, including globalization and democracy, environmental solutions, child and family policy, capital markets, gender, race and class, Americas Studies, cognitive psychology, demographic studies, and many more. As the forums that have been held in several schools of the university in the wake of September 11 have made clear, understanding such phenomena requires transcending any single discipline. Quite a few of our most exciting current endeavors bridge both the social sciences and humanities, to bring to bear our best possible collective thinking on issues that are crucial to our lives.

No social scientist could have "predicted" 11 September in detail, in the sense that a good natural scientist tests an hypothesis by making a prediction that is or is not borne out in experimentation. There is no way to experiment, to go back and change the conditions before we replay the tape, to see what factors were most obviously responsible. Human events of this kind are extraordinarily complex and are, in the most basic sense, unique. But despite the enormous difficulties of analysis in any of these fields, it is imperative that we at Duke and elsewhere do the intellectual work we call the social sciences as well as we possibly can, for the sake of our whole future.

Let me close with a poem called "The Attending" published in the News and Observer on October 14. It was written by the poet laureate of North Carolina, a Duke graduate, Fred Chappell. It brings together beautifully
much of what I have been trying to say, especially about the humanities, in this troubled time.

Let us, in this time of bitterest lament,
Go awhile apart and meditate
And reverently attend the ancestral choir
Of prophets, sages, founders of the state,
Who lend us strength and solace when the world is rent
And everywhere besieged with fire.

Let us linger, as we may, within the grove
And hear those voices in the heat of day
Speak like gentle winds stirring the silence
Softly in their never-ceasing play
Of loving variations on the theme of love
And weary descant against violence.

For we are nothing without the ones who came before,
They who with palette, loom and graceful pen
And sculpted stone, with treatise and debate
Built our world and built it up again
When it was brought to rubble by incendiary war
And the towering, sword-blade flames of hate.

And let us join with them in spirit by going to
Their words and deed that make our history
A matter of some pride, if we will know
The best of it, forgoing vanity
And boast and doing calmly what we ought to do,

As they did then, a world ago.