Traditionally, universities have independently sought and preserved knowledge and prepared students for professional careers, although society has influenced and supported their objectives. Today's universities, challenged by the increasingly complex needs of society, are responding with educational innovations that are usually profitable to both. Rapid changes in higher education since 1942 have made graduate education a vital component of the university for responding to modern demands. The resultant specialization has expanded the possibilities for relating academic programs to social needs. Additional educational adjustment is essential, however, so that immediate social problems such as drugs, the decay of the inner cities and others may be effectively resolved. Efforts should be made to create academic environments that are compatible with individual growth and stimulate learning. Such an educational climate would produce students ready to apply their knowledge toward curing social ills, and thereby encourage the development of better relationships between themselves, the university, and society.
In ancient times when trade was reawakened in Western Europe, trade routes clung close to walled towns and tradesmen with their goods stopped under the walls beseeching and paying for the protection of the lord of the castle. It was better to pay a price to one lord than to be exposed to the unknown dangers of the countryside. Faubourgs or dependent enclaves of merchants grew up around the town; fairs were held in season; commerce grew; people became more prosperous, more specialized and more interdependent; and from these enlarged communities created for protection and trade the modern city was born.

To some of these cities scholars came, seeking the same protection that attracted the merchants. But scholars were attracted, too, by the merchants' goods, and fairs. Then, as now, they liked to be where the action is. In unsettled times, the King of Naples or the King of England intervened to promise safety if the scholars of Pisa or Paris would migrate to their estates. So we may be justified in speaking as though the community of scholars was called into being by society to serve its social ends.

Kenneth Boulding, in describing the rise of the university, refers to the Pinocchio Principle. Society fashioned its university like the woodcutter Geppeto fashioned his puppet. (You'll forgive me, I hope. I first wrote "dummy"); we set the university on its feet thinking to be served and pleased by our creature, but discovered that the puppet
walked, had a life of its own, and was surprisingly willful.

The business of the university is truth which it engages either to preserve or to find. The efficient force in a university is generated by scholars who behave largely independently but under rules which we call the laws of science or the rules of evidence. Under these laws each scholar mines his own data and interprets them under rules of parsimony. For the scholar the sin against the Holy Ghost is faithlessness to the data. Like Pinocchio, any scholar or university is made to look foolish that is unwilling to follow the data where they lead, but rather stretches or withholds evidence to save a preconception. Each of us knows of, or may be, a scholar who has had his nose out of joint because reviews were bad. But if our mistakes have been honest ones, the corrective force that comes from exposing our ideas to public view is welcome. We can review the data, correct our errors, refashion our hypothesis and move again to the attack with renewed confidence. And for this reason, and not for volume of pages, the rule of publish or perish has some validity--and the rule can be applied better to the entire enterprise of scholarship than to the career of an aspiring assistant professor.

The school or university is also a place where careers are planned. The most noble objective of scholarship is truth. But usefulness is a handmaiden not to be despised. And from the beginning usefulness has been an expected virtue. The professions of church, law and medicine were the central concern of the early university. To them we have added engineering, business, agriculture, journalism, to name a few. In preparation for each profession there is a body of knowledge and a skill
or an art of doing. Though we often try to make invidious distinctions between pure and applied sciences, there is substance at one edge and technique at the other for the historian as well as the engineer. At the outer edge where we are most specialized and where we are most proud, we are all professionals, we all sell our services, and we are or can be worthy of our hire.

In more modern times the society that supports and continuously recreates us is very different from the simple society that first saw cities rise in response to awakening trade and commerce. Now the goods that fill the arteries of commerce are so transformed by technology that the raw product is completely disguised. Who would have envisioned raw petroleum in the form of nylon fabrics? or have believed that plastics could be made to sing? that metal wings could carry 150 people and tons of baggage? The goods we sell nowadays are best expressed as ideas impressed on nature rather than being the products of nature herself. And we have learned to expect that we can do anything--travel through space; live under water; mine the sea; free ourselves from the limitations that gravity and time have imposed upon us. But though we may seem to be wonder-working giants when we pool our specialized skills, in isolation we are pigmies. One blackout in the northeast, or the failure of a carburetor on a modern freeway, reminds us that, adaptive as we may be as homo sapiens, we are far too specialized now to survive the loss of our technology. So the analogue to the medieval walled town is, for the modern entrepreneur, the university. The faubourgs of brain industries grow up "alongside its outer ivied walls" seeking the protection, the
support and the injections of newly discovered truths or techniques. And the cycle of the scholar's life seems to have gone full circle so that in relation to the contemporary society, a university is both creature and creator.

For the school there are two classes of scholars: the teachers and the learners. In most of the literature the student is the undergraduate, and if a graduate mission changes the traditional ecological conditions of the undergraduate, the standard reaction is horror. One would judge from casual observation that graduate education was an intrusion, not healthy, not necessary, but rather threatening to the success of the institution's central mission. Yet graduate education is a logical, natural, necessary adaptation to expanding possibilities, expanding opportunities, and expanding imperatives in modern life. From their first invention universities have been a response to societal needs. They have not been static. The body of knowledge taught in 1492 would be represented at best by a vestige in 1942. Yet the university of 1492 and the university of 1942, so different from each other, were both universities for their time and their time's needs. And the charge of irrelevance was for each equally true and equally false. The changes in the quarter century since 1942 have been greater than for any like time in the history of higher education. And these changes have made the graduate program inevitable. Graduate education must be accepted as an integral part of our modern obligation, not treated gingerly as an unwelcome threat to nostalgic memories of quieter, happier undergraduate peace; otherwise, future education
will not be adjusted to the requirements of the school, the scholar, or the society.

We not only have more knowledge to bring within our purview, we are now committed to universal opportunity. This is not quite the same as universal higher education, but it does press us to a broader mission. One of the inconveniences of this new circumstance is that those who ask and deserve equal opportunity from universities are not equally prepared to participate. And from this unequal preparation arises a crisis of relevance.

Education is not an absolute good prepared and packaged for delivery in standard sizes. It is a means to serve other ends. If the end is mathematical skill, the education must be designed to reach down to meet the student. If the instruction is not related to the student's level of preparation, it is irrelevant. If after reaching him it does not stretch him, it is still irrelevant.

Our problem of numbers is not just that there are more bodies, but that there are many more and different minds differently prepared, coming from different milieux and bringing different expectations, and that they, or many of them, must be taken farther than ever was true before.

Everywhere one hears talk of relevance these days. Often the word is a stereotype in the mouths of dissenters. But we do need to ask what our educational program is related to. The obvious first checking point is the student; the second is his objective; the third may be society's objective. But the substance need not rise from any
immediate problems. Immediacy and relevance are only accidentally coincident. Dante remains relevant wherever the human spirit needs stretching, and I need not be Italian, and late medieval at that, to profit from his writings.

The problem of the inner city is an appropriate concern of scholarship; and so are drugs; and so is war; and so are law and order; and freedom and its challenge or contribution to order. Life is filled with imperatives that require immediate attention. Listen to Ortega:

Lifc cannot wait until the sciences have explained the universe scientifically. We cannot put off living until we are ready. The most salient characteristic of life is its coerciveness: it is always urgent, "here and now" without possible postponement. Life is fired at us point blank. And culture, which is its interpretation, cannot wait anymore than can life itself.

But how does the university facilitate work on immediate problems? Does it mount crusades for social ends? If so, how does one identify consensus in the confusion of different, individual, strongly held convictions that so characterize a faculty? The normal process of seeking corporate consensus in a university usually engulfs the energies of affected scholars and, for the time, paralyzes the efficient forces upon which the university and the society depend. Moreover, crusading, except for the freedom of its scholars, is inappropriate to the role of a university. The corporate university exists to assure a proper climate for, and to facilitate the work of, scholars who are as individuals the efficient force in the academic enterprise. They should, by definition, be of such varying interests that consensus should not be easy. In such an environment teacher scholars and
apprentice scholars should grow toward wisdom. And with their own wisdom, freely and individually applied, they should try to cure the social malaise. By scholar-making, the university helps fashion the units by and from which a better society can be built. If it turns away from scholar-making to mend broken ditches, the sweet well of future life will dry up.

As I inferred earlier, talk of relevance is everywhere with us. Here I hope I may have conveyed my perception of the relatedness of the school, the scholar, and society.