# The American Strategy among Several Alternatives— Five Strategies for Education, and Their Major Variants\*

This essay was part of a series of five lectures I gave at the University of Nairobi. Kenya was then considering moving from a system of higher education modeled on England to a more American type; and I was arguing, indirectly, for the American type. My lectures were identified as Gandhi Memorial Lectures because the Indian community in Kenya, then under increasing attack, supported them as a goodwill gesture.

Education takes many forms in many places. It is not one, but many things. One errs in talking about *the* contribution of education to national development without specifying what kind of education, for whom, at what stage of development, and where. Some kinds of education for certain kinds of people under one set of circumstances may be very helpful; and the same kind for different people under other circumstances may be equally harmful. Western models do not work equally well in Africa or Asia. Education is a multiform, not a uniform, phenomenon.

# Model I. Elite-oriented Education

One strategy for education is to consider it as serving a small elite only. This elite may be defined by birth—an aristocracy, or by demonstrated talent—a meritocracy, or by some combination of both. The difference between definition by birth and by talent, however, is a substantial one. The persons chosen will be quite different because talent does not uniformly follow family origin. The method of selection is quite easy when based on birth and quite difficult when based on talent. The latter basis requires much better primary and secondary schools that are widely distributed and better methods of examination. The tone of the educational process varies also, from a leisurely one when based on birth to a highly competitive one when based on talent.

Yet there are substantial similarities in education serving elites defined by birth or by talent. In each case, small numbers are involved. The curriculum tends to be of the classical type: all students receive much the same background in terms of the central content of the curriculum and the style of approach in residential living and codes of personal conduct. Once a student is on the ladder, the effort of the system is expended on his or her support as an individual and on the student's preservation within the elite group. Graduates enter into a distinct class status raised far above that of nongraduates. The quality of academic degrees is held, wherever possible, to a single "Gold Standard." A degree has a certain value for all holders regardless of what field they study or their personal performance. Graduates have an assured status.

The British system of higher education until the middle of the nine-teenth century was elitist, and largely hereditary elitist. Entry into Oxford and Cambridge was limited by rule to males who were members of the Anglican church and in fact mostly to sons of the gentry and the upper middle classes. During the next century, reliance gradually was placed more on talent and less on heredity. Good preparatory schools based on talent were developed, and effective sorting examinations were devised. Harvard, in the United States, followed a somewhat similar historical course. The Scottish universities were always more open to talent. Sub-Sahara Africa with its missionary schools and French lycées followed the meritocratic elite system then in effect in Britain and France. China had such a system to prepare its mandarins for two thousand years.

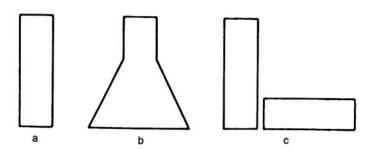
Higher education in Latin America, by and large, has not yet given up selection on the basis of family position in favor of selection based on talent. One reason for this is that the good secondary schools are almost universally private and costly, although higher education is generally tuition free. Thus only the children of the wealthier families can qualify for the university through prior attendance at the better secondary schools. And, once they arrive at the universities, they are often but not always heavily subsidized from the public purse. A largely unconnected mass elementary system of low quality exists for the children of peasants and workers. There is almost no way for talent to rise through the formal system of education. It is more likely to emerge through the military forces. Much of the Moslem world parallels the pattern found in Latin America. Ancient Rome also had an elitist system for children of the upper class based on tutors and private schools and a large-scale elementary system for the masses.

There are, then, at least three major elitist approaches: (1) The hereditary elitist, which may be visualized as a ladder that leads from entry almost automatically to exit. (2) The meritocratic elitist, which has a broader base: able young persons are sought more widely than in the wealthy classes alone and are subject, in the early stages of education, to intense competition through which some are eliminated. (3) The hereditary elitist,

with a separate, largely unconnected, low-level egalitarian system at the primary level, looking like a disconnected figure L (see fig. 1)

#### FIGURE 1

# a, Hereditary elitist; b, meritocratic elitist; c, hereditary elitist with a separate mass elementary system



# Model II. Production-oriented Education

The University of London, which was founded in 1836 with a different orientation than that of Oxford and Cambridge, was much more open to bright young people drawn from the total population and not only trained them to be scholars and gentry, but also prepared them for a much broader variety of professions. A great system of training for the health professions was developed there long before Oxford and Cambridge took any broad interest in such training. The redbrick universities in England followed London's lead.

The most dramatic step toward the occupational orientation of higher education took place in the United States with the founding of the land-grant universities at the time of President Lincoln. These institutions aimed to serve the children of farmers and workers. They turned their backs on the classical curriculum of the day and, instead, sought to fill the needs of developing industry and agriculture for managers and technical experts. They were oriented not at all toward class status but clearly toward productive effort.

Russia, after 1917, moved in the same general direction, but with more ideological content, more centralized control, and even more emphasis on technocratic aspects. The purpose in Russia, as in the United States, was to aid the economic growth of an advancing society and, simultaneously, to open up new opportunities for more of the youthful population.

Japan, since World War II, has enormously expanded and diversified its national system of higher education. Adopting a production-oriented approach to education, Japan has put less emphasis on university-based research than either the United States or Russia. Applied research in Japan has been left principally to large private industry, and basic research, until recently, has been comparatively neglected.

The tendency in all production-oriented systems is to concentrate at first on high-level manpower and then, more gradually, on paraprofessional manpower. This development reflects three factors. First, full recognition of how many paraprofessionals are needed to make good use of the highly skilled professional is usually not forthcoming. Second, for educating paraprofessionals, to the extent that they are used, reliance is initially placed on secondary schools and on on-the-job training. Later, provision of some formal training at the postsecondary level as well is usually found desirable. Third, paraprofessional training has lower status and is avoided by students if they have the alternative of professional training. As industrial growth proceeds, however, this impediment is less effective, and paraprofessional training becomes more common. Policy conclusions based on these three considerations have contributed to the rise of community colleges with twoyear programs in the United States. They are now, in enrollment, the largest single element of American higher education. In Canada, community colleges and comparable institutions more than doubled in size in the 1960s. The British government recently has particularly aided the polytechnics, and Australia has done the same for the institutions of technical and further education.

A modified occupation-oriented approach is the civil-servant approach: education, particularly secondary and higher education, is designed to turn out civil servants rather than the whole range of professionals and paraprofessionals required by an industrializing or industrialized nation. This narrower concentration has marked France, India, and much of Africa until very recent times. Napoleon in France and the British colonial authorities in India both concentrated on the need of the state for well-trained civil servants. In both countries today teachers are included in the class of civil-servants.

Another variation of the production- or occupation-oriented model entails preservation of elements of the older classical system reformed to include a meritocratic base and the addition of a new technocratic system. The land-grant universities were founded while the older liberal-arts colleges continued to thrive in the United States; the redbricks were added on to Oxford and Cambridge; the technical universities to the Humboldt-type universities in Germany; and now, in Latin America, new technical universities are being started while older universities, such as San Marcos, remain largely unchanged. Over a period of time, classical institutions, in

competition for funds and students, begin to look more like the newer, technocratic institutions. There is a movement of the classical institution toward the production-oriented institution, and the civil-servant institution begins to train for a wider range of careers—thus also merging toward the dominant modern type.

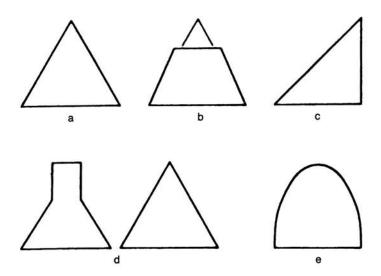
The pyramidal model may change shape, as in the United States, when more jobs require more training and more persons can afford more education. The sides will slope less steeply as more people stay in school for a longer period of time, and the apex will be rounded off as many more positions require training at quite advanced levels. The shape becomes that of a haystack.

There are, then, at least five major production-oriented approaches: (1) The pure pyramid, which is closely tied to manpower planning, with a universal base of literacy, topped by successively smaller components of training for clerks and technicians, advanced technicians, scientists, scholars, and advanced professionals. Within higher education in Russia, only 10 percent of the students are in universities; 90 percent are in technical colleges. The United States demonstrates a more varied approach because dynamics of the labor market, rather than manpower planning, fit education to jobs, and because the system responds to student demand for education beyond the needs of industrial production. (2) The truncated pyramid, or partially truncated pyramid, as in Japan, where great emphasis is placed on primary and secondary education and less (until the postwar period) on higher education. (As a corollary, the universities are weak in basic research.) This pyramid has a reduced apex. (3) The half pyramid, found historically in France and India, with emphasis on training for the public civil service rather than for private industry and commerce. (4) The pyramid rising alongside an older elite system, as in England where until recently the redbricks drew heavily on the public grammar schools while Oxbridge continued to draw substantially on private schools like Eton and Harrow. (5) The advanced-stage pyramid with a more rounded top, when more and more occupations require more and more training (see fig. 2).

One may note that the pyramidal approach applies within higher education, as well as to the totality of education, and results within higher education in an emphasis on differentiation of functions—some elements have higher academic value and some, lower. Thus, the binary system in England; the universities versus the technical institutes in Russia; the tripartite system of community colleges, state colleges, and universities in California; the institutions of technical and further education, the colleges of advanced education, and the universities in Australia; and so forth. There is no Gold Standard. There is instead a diversity of programs, standards, and status. In all pyramidal systems the emphasis is on identifying and

# FIGURE 2

a, Pure pyramid; b, truncated pyramid with reduced emphasis upon higher education, including research; c, half pyramid, directed toward civil-service occupations; d, pyramid arising alongside an older elitist system;
 e, advanced-stage pyramid



eliminating the less able individual and on preserving within the system only the most able. Less able students drop off as the slopes rise higher.

# Model III. Universal-Access Education

A third approach is universal schooling and open enrollment in higher education, which is open to all persons eighteen years of age and over. California (1960) and New York City (1970) are examples in the United States, and within the foreseeable future, 95 percent of all Americans will be within commuting distance of an open-access college. The first community college in the United States was founded in 1902, and the University of Chicago opened its adult extension division in 1892. Community colleges and adult extension are the two great devices tried in the United States to date to achieve universal open access.

As other examples, Britain has now established (1970) the Open University; Japan has begun (1971) the "University of the Air"; Sweden is establishing regional centers attached to its universities; Spain is planning an "open university"; the University of Nairobi has a "Mature-Age Entry Scheme."

The open-access approach to higher education in industrialized nations follows four developments: first, the prior creation of universal primary and secondary education; second, the continuing need by employed persons for technical retraining in the midst of dynamic technological changes; third, the widely held view that education should be a continuing part of the lives of all people who wish it for whatever purpose; and fourth, the new electronic technology which makes an open-access approach possible.

Open access to higher education relates to a basic question: Does education exist for the sake of an elite in a class society, for the sake of productive efficiency in an industrial society, or for all people throughout their lives in a populist-oriented society? Given the financial resources and necessary levels of prior education, the concept of open access to higher education demands that education be available to all who wish it. The courses taught will cover many more subject areas than either elitist or productionoriented higher education. Many courses, for example, will be oriented toward consumption activities. An elitist curriculum is more directed toward development of political leadership; a production-oriented curriculum, toward the needs of the labor market; and the open-access curriculum, toward the interests of daily life. Academic standards will be lower, on the average, in an open-access system and may even disappear in some areas in favor of mere attendance. Remedial work for adults will be a major component. Relevance is not defined as what a highly educated person should know, nor as what an expert must know, but, rather, as what any person may want to know for whatever reason.

Open access may extend to college-age youth only, or to persons of all ages.

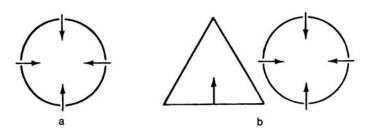
The open-access approach may not only develop in wealthy industrial, fully modernized, societies but also in largely rural societies with a low level of per capita wealth. Gandhi, for example, wanted to make "basic education" available to all the people living in a village to assist them in all aspects of their lives. Tanzania has advocated "education for self-reliance" for its entire population. Modern China has instituted literacy training and basic education throughout its vast country. A century ago, Denmark began its rural folk schools. "Store front" schools, in a few American ghettos, follow the same general pattern. An industrializing nation may adopt a form of open access at some level, or levels, of education based on an egalitarian ideological drive, or as a way of letting everybody in—for political reasons—on some of the improvements in society, or as a way of keeping people in rural areas so that they will not swamp the modern sector.

Open access may be developed as a pure system, standing by itself, as Gandhi essentially wanted since he did not favor industrialization. Or it may be added onto a production-oriented system serving modern industry and government.

There are, thus, at least two major forms of open access: (1) The pure type with equal educational opportunity for all citizens. (2) The alternative type where an open-access system of education stands as an alternative to the meritocratic system (see fig. 3).

FIGURE 3

a, Pure open access; b, open access as an alternative



Of course, comparatively heavy emphasis in the second type may be placed on the pyramid (as in the United States), or heavy emphasis may be placed on the circle (as in Tanzania).

In any event, open access can arise under quite diverse circumstances: as a chosen instrument in a progressive, egalitarian, largely rural society; as an adjunct to the modernizing sector of society—perhaps as part of a rural development program; or as a supplement to the meritocratic educational system of a highly industrialized society with populist tendencies. As open-access approach may be combined in various ways, and for various reasons, with a pyramidal system. Open access, however, is essentially incompatible with an elitist—particularly a hereditary elitist—approach. Egalitarianism and hereditary elitism make strange bedfellows in education, as in society as a whole.

# Model IV. Horizontal Education

Recently, the suggestion has been made that education, which has historically been vertical in the effect on social stratifications, be laid on its side horizontally. The "knowledge commune" has been posited as a central aspect of "horizontal collectivism." In a society fitting such a model there would be no highly trained experts; people would rotate from job to job as they saw fit. There would be equality among teachers and

students in the knowledge commune—no "chair" professors, no assistants, no subservient students. No one would be allowed to rise above a certain fixed level. Society, as well as the education system, would have a flat profile when projected graphically. Education would be an instrument of leveling conformity.

This model may be visualized as a horizontal line or, perhaps better, as a wide room with a low ceiling (see fig. 4a).

This is a vision that is beautiful to some but one that I do not believe realistic. Some experts, meritocratically selected and trained, are needed to make an atom bomb, even in Maoist China. The little Red Book does not suffice in this case, nor in the provision of surgical care or the building of bridges and dams. No modernized or modernizing system can get along without technical experts and the necessarily pyramidal educational structure to train them. Modernization is not a necessity, but a pyramidal structure of education is essential if modernization is undertaken.

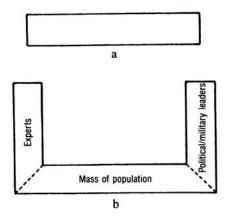
Horizontal equalization of all citizens in all aspects of their lives engenders enormous pressures for conformity, and these pressures require a supreme charismatic personality or a strong bureaucratic hierarchy—or both—to give inspiration and to assure control of the masses. The greatest personality cult in the world today is that surrounding Mao Tse-tung, who during his lifetime had the backing of an all-pervasive military establishment. Furthermore, different people have different tastes, interests, and abilities, and it would be both unwise and impossible to confine them all on a horizontal level forever. The leveling of humanity to one universal standard is inconsistent with both human nature and the realities of the modern world.

Nevertheless, the horizontal approach has been tried recently in a modified form in China during the cultural revolution. A political and military elite remained, however, above the mass of the people, as well as a small technological elite with an educational background. The experience of China may be termed a modified horizontal approach with two small elite classes rising above the horizontal mass—one raised through on-thejob training and selection (political and military leaders) and the other through formal education (technical experts) (see fig. 4b). This approach, in fact, looks something like that found in Latin America, but it is quite different because the Chinese elite groups were chosen on the basis of ideology and merit, not heredity, and through on-the-job selection and training as well as education. The mass of the population was held to low levels of education, not as a result of poverty but as the consequence of an ideology emphasizing the interchangeability of persons in the essential roles of soldier-peasant-worker. Enforced homogenization, politically determined, was the force at work in China rather than socially and economically determined neglect.

The horizontal approach is quite different from open access. The open-access approach allows an individual to obtain whatever education he or she wants, at any time and at any level. The horizontal approach not only sets a ceiling on individual aspirations but also prescribes a set curriculum for everyone regardless of individual interests. The curriculum is heavily oriented toward literacy, ideology, vocational skills, and "coping" skills in health, nutrition, etc.

FIGURE 4

a, Horizontal-egalitarian; b, modified horizontal approach with elite groups



# Model V. Atomistic Education

This may be viewed as the oldest, or the newest, or the most constant form of education: oldest because education began informally in the family and on the job, newest because of recent proposals for the "deschooling of society," and most constant because education always takes place informally as well as formally—in the home, on the job, in the library, beside the radio, in front of the TV screen. The emphasis in atomistic education is on the individual being educated as a by-product of some other activity or on his own, but not through a system of formal education. Atomistic education might be represented by a series of random dots (see fig. 5). Such a system can coexist with any of the other systems we have discussed, but it is most consistent with the open-access approach. The atomistic system if dominant will supplant all other systems; its central theme is ultimately incompatible with the organized character of the other models.<sup>3</sup>

#### FIGURE 5

# Atomistic education

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Current interest in atomistic education comes from philosophical anarchist sources. Proponents argue that most, or at least many, people in the world are not now receiving formal education and that universal formal education is too expensive to attempt to realize; that formal education unwisely elevates some people above others and does more harm than good by smothering interest in learning and alienating youth from manual labor; and that schools serve to perpetuate the status quo against the real interests of the people by teaching them to be passive consumers of whatever the society offers. Apprenticeship training and informal learning centers, which people can enter and leave when they wish, are favored instead of formal schools. The argument calls for the abolition of all compulsory attendance in education and of all degrees and certificates. The content of individual learning programs would be highly idiosyncratic.

#### Conclusion

The five pure models of educational systems I have presented vary from a vertical line to a pyramid, a circle, a horizontal line, and a series of dots.

I have set forth these several strategic approaches to education first to reinforce the point that education is many different things and must be looked at in its specific forms rather than as a single form, and second to emphasize the range of strategic choices that societies have chosen and may choose among.

The elitist approach responds to social class in a stratified society. All persons who step on the lowest rung of the ladder are expected to climb to the top, and most do so. Dropout rates are low. Emphasis is on the selection and training of political leaders.

The occupational approach to structuring education responds to dramatic insistence on national economic growth, to skill needs in a productionand service-oriented society. Students drop out when they face increasingly difficult competition or when they choose to withdraw. Emphasis is on the selection and training of experts for industry, commerce, and the professions, on the skills related to the production of goods and services.

The open-access approach responds to populist pressures, to the interests of all the people all of the time. The circle is open to them at any time and contains any subject they may want to study. Sir Eric Ashby has written about this, in the American context, as "any person, any study." Nobody drops out by definition. Some persons may choose to stop out, however, precisely as they may choose to stop in. The emphasis is on everybody and free choice.

The horizontal approach is grounded in an egalitarian ideology that emphasizes the homogenization of the masses who have no free choice.

The atomistic approach turns its back on all formal schooling as not only unproductive but even counterproductive.

The elite approach fits best a nation under either dynastic or colonial leadership; and the occupational model fits an industrializing society with middle-class or nationalistic, socialistic, or communistic leadership.<sup>6</sup> The open-access approach best fits an egalitarian rural society, or serves as an adjunct to the modernizing sector of a developing nation, or stands as an alternative and supplement to the meritocratic structure in a modernized society. The horizontal approach is found, in modified form, in an ideologically managed political and military dictatorship. The atomistic approach is connected with anarchistic thought and the socioeconomic conditions of primitive society.

# Notes

- \* First presented as the Gandhi Memorial Lectures, University of Nairobi, 1972, and adapted from a chapter in Clark Kerr, Education and National Development: Reflections from an American Perspective during a Period of Global Reassessment (Nairobi: East African Publishing House, 1979). Reprinted from Comparative Education Review 23, no. 2 (June 1979): 171-82. Used by permission of The University of Chicago Press.
- 1. Johan Galtung, "Social Structure, Education Structure and Life Long Education," mimeographed (Paris: OECD, November 1970).
- 2. Ivan Illich, Deschooling Society (New York: Harper & Row, 1971). Also see Paul Goodman, Compulsory Miseducation (New York: Horizon, 1964), and his essay in Summerhill: For and Against (New York: Hart, 1970), 205-22.
- 3. While atomistic education is not a viable total approach to education in industrialized and industrializing societies, proponents of atomistic education have

added impetus to some developments which have been taking place for other reasons, such as (1) more efforts to find talent throughout all elements of the population, (2) more attention to lifelong learning opportunities, (3) more active participation by learners in the educational process, (4) more acceptance of individualized learning programs, and (5) more use of noneducational institutions for educational purposes.

- 4. See Everett Reimer, School Is Dead: Alternatives in Education (Garden City, NY: Doubleday, 1971).
- 5. Eric Ashby, Any Person, Any Study: An Essay on Higher Education in the United States (New York: McGraw-Hill, 1971).
- 6. For a discussion of the various elite groups that lead the industrialization process and their several strategies, see Clark Kerr, John T. Dunlop, Frederick H. Harbison, and Charles A. Myers, *Industrialism and Industrial Man: The Problems of Labor and Management in Economic Growth* (Cambridge, MA: Harvard University Press, 1960).