Although knowledge has no visible bulk, it requires space as surely as students do. (Clark Kerr)

THE POST WORLD WAR II MULTIVERSITY

When considering utopianist university design there is a lot to be said for taking the USA as a starting point. Two simple facts should be considered: during the whole of the last two centuries no other country founded such a vast number of institutions and conducted such a thorough and diversified discussion on all aspects of higher education. After World War II, the USA took the world lead in academe. At the risk of adding to the mountains of writing that already exist, the basic rationale here is twofold: to take a look from outside and to help prepare for the rest of the book, by providing initial definitions of campus and college.

In 1973 Clark Kerr, president of America's largest educational institution, the University of California, closed a new edition of his tract, The Uses of the University, by reminding his readers not to forget the 'relation of the university to the eternal search for Utopia'. More recently, in his comprehensive and balanced work on American university architecture, Paul Venable Turner concludes that these buildings have been 'shaped by the desire to create an ideal community, and have often been a vehicle for expressing the utopian social visions of the American imagination'. Utopian, in turn, can be synonymous with 'American' and many other such key terms, as justice, compassion, truth, nation. The values of the major American institutions are claimed to be those of the country as a whole. The institution closest to the university would be the American school whose ethos and architectural splendour is often not a long way behind. Even for an analyst of universities who normally stayed clear of strong rhetoric, the sociologist David Riesman, higher education was 'everyone's right'. By the early 1970s this idea culminated in more down-to-earth statements: 'no student who wants to attend college should be prevented from doing so' (President Nixon before congress in 1971). Equally important was the idea that having entered the system even at the lowest levels, the chances for advancement were strong

The normal trajectory would thus be to state the utopian aims and then to measure the reality against it. The chosen procedure here will be mostly the opposite one. Utopianism, as opposed to utopia, is always a matter of degree, it exists in constant argument, not only with anti-utopianism — which will concern us much further on in this book — but also with non-utopia, with simple pragmatism, or calculated instrumentality, and that within each of the sub-discourses, within each of the professions dealing with the universities. When we come to the story of the English New

Universities of the 1960s, we will meet a more united stress on utopia within a single episode, whereas in order to properly evaluate some of the peaks of postwar American university design, we have to begin with diverse elements in diffuse debates, going backwards and forwards between imagination and reality, between idealism and instrumentalisation, between high and low. For Turner, the twentieth-century manifestations of utopia are identical with the peaks of architectural quality. In our context, the definition of utopianism concerns wider, non-architectural aspects of the institution and a greater number of agents than just the architect and his or her immediate clients or university founders, as they happened to be on the architect's side; we also need to take note of the aspirations of the educationalists, as well as of the college psychologists and the campus planners, all of whom emerge as strong subgroups in our period. The architects, too, are jostling for position in the aim to create the ideal institution; at the same time each profession wants to stress its own expertise and importance. These considerations form the major subtext of this chapter.

For American historians and analysts of the university only three countries matter: England, Germany and the USA. 'To the English concept of the educated gentleman and the German concept of scholarly research for its own sake, the American university added another dimension, namely, that higher education to justify its own existence should seek to serve actively the basic needs of American life'. Sharper opinions may be found earlier, calling 'Oxbridge an expression of English aristocracy . . . Berlin and Leipzig representatives of German imperialism . . . and the small colleges in [America] the expression of the democratic spirit which is the true American spirit'.

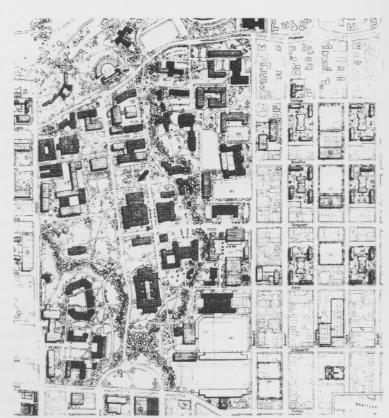
On the whole, though, can American higher education, with its 3,000 or so institutions (in 1993), be called a 'system' or an organisational or constitutional unity? True, there has been, for some decades now, much state and central government finance, and many institutions are linked by a system of accreditation in order to ensure the comparability of degrees. But American colleges and universities are not 'of the state' as those in most other countries. Neither would, today, the term 'private' fully express their status; what matters here is that virtually every institution, 'private' or 'state', forms an independent organisation, for which 'non-profit-making' is probably the best characterisation. To cite again an American notion of the situation in Europe: the old English universities are run by faculty, most Continental European ones by the state, while American colleges and universities are normally run, not unlike large businesses, by their Boards of Trustees, with a strong president at the helm. Each institution is furnished with its own large administration, free to shape itself as it sees fit. The primary task is to attract donations as well as good students, through maintaining an image of quality, or a particular historical or religious identity. Institutions range from those with the emphasis on pure research and an international reputation to the localised junior college - to the level of English 'further education or even of the German higher schools - with innumerable shades in between; size varies from a few hundred to tens of thousands of students.

In the context of our investigation of the shapes of institutions, however, these differences or rankings do not carry much significance. Any institution may call itself 'university'; or may bear the name 'college', from Harvard College to the remotest community college. The ranking scale is simply seen as a reflection of the uneven distribution of wealth and established reputation in society generally, which is taken

for granted and thus does not interfere with the utopian project as a whole. It largely concerns purely academic standing and not necessarily the socio-educational aspects of the institution which are the main parts of the American utopian mission. It was the utopian trajectory which gave unity to the project of the generic American college, while the notion of freedom accounts for its diversity. There is thus no single model of a university and there was also, in the years post World War II, no movement strictly comparable to the European ones of creating entirely new, 'reform' universities. Only a small number of states devised such policies 'from above', for their own public universities. In principle and in practice, each American institution was in charge of its own image and its own constant reform.

The high rhetoric, such as Clark Kerr's, more often than not contained a historical dimension which the utopian spirit could turn into statements such as 'the true American University lies in the future', but which, characteristically, always included both a measure of dissatisfaction with, as well as a measure of pride in the American past; as Alan Touraine, the French sociologist of the 1970s, noted, compared with France, most American universities are quite old. Any history of American higher education would stress: 'the foundations . . . laid in colonial time . . . still standing in the twentieth century'. However, this did not mean a straightforward line of tradition. Characteristic, in fact, were continuous intense discussions and searches for new models, at least from the post bellum period onwards. America then began to import from Germany what was characterised as 'learning for its own sake', synonymous with research, or postgraduate studies, and played down the older English social character of the institution. It was at this point that the term university was firmly introduced. Johns Hopkins at Baltimore, for instance, no longer wanted to call itself a college. It was also the time of the large new, state-founded 'Land Grant' campuses. With it came the response to the vast need for technical education which, contrary to many of the European developments, remained within the realm of higher education. However, as elsewhere, a strong duality developed: technical and practical subjects vs. humanities, corresponding to the English polarity vocational / educational or the German opposites Fachwissen and Bildung. As the strong social stratification of the country kept its hold, the first was normally located at the lower end, the second at the higher end, not only in social but in academic terms as well. This, in turn, became firmly linked, during the early twentieth century, with the polarity of large state vs. small private institutions.

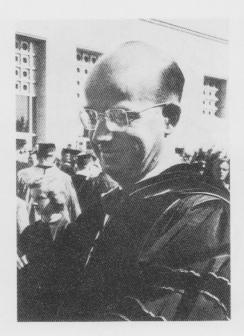
However much stress there is on historical unity, the new developments in the three decades after World War II did form a distinctive period in the history of American higher education. As regards general expansion, the USA started a dozen or so years before the Europeans. The first major impetus came with the Veterans' return in 1945, which must also have had something to do with the 'war babies' wave in the 1960s. In 1947–8 a Presidential Commission published *The Higher Education Report for American Democracy*, the 'first comprehensive rationale for mass higher education'. In 1957 a most momentous and unexpected incentive occurred in the form of the 'Sputnik shock' which drove efforts to raise both quantity and quality. Federal financial contributions had already risen rapidly since the Depression in the 1930s. By 1970 federal and state aid to education amounted to 71 per cent (in Britain, in 1966–7, the figure of state finance was 87 per cent) and money from other sources also increased and enabled the old and privileged private institutions to flourish, too. The actual overall



1.1 The multiversity: University of California Berkeley 1959. To the designers of the 1960s it appeared a typically planless campus. (*ARec* 9-1959, p. 162)

cost of 'producing' a graduate kept rising, until about 1970, by 5 per cent per annum. Uncountable numbers of new institutions were founded each year, usually by the state, the vast majority as junior or community colleges. Between 1963 and 1975 the total number of universities and colleges doubled. Total student numbers rose from 2.7 m in 1955 to over 7 m by the end of the 1960s. A further measure of equality was the rise of the proportion of women, from 38 in 1960 to 51 per cent in the late 1970s, and of blacks, from 6.6 in 1960 to 13 per cent in the late 1970s. The proportion of American youth in higher education, about one half, was very significantly higher than the equivalent measure in British higher and further education (even after taking account of the high American drop-out rate, 40–50 per cent). Equally important was the increase at the upper end so to speak. Between 1955 and 1968 graduate enrolment trebled, from $\frac{1}{4}$ million to $\frac{3}{4}$ million. The chief perception was simply that of expansion in all directions.

There was widespread agreement that 'Americans today have higher expectations of the university than they do of practically any other social institution'. 'Higher education, including the research complex, has become the most critical single feature of . . . modern society' (Talcot Parsons). Moreover, the old conundrum of unity and diversity had taken a new turn. The traditional triad of education, scientific research and, at a lower level, technical instruction, were now moulded into a heightened perception of their equal usefulness to society. A new kind of institution had arisen which to some extent levelled the differences between the old diversity of institutions: the multiversity. It could mean a single large campus, or a confederation of sites.



1.2 Clark Kerr, President of the University of California 1958–7 and initiator of the campuses at Irvine, San Diego and Santa Cruz. (C.M. Otten, *University Authority and the Student. The Berkeley Experience*, Berkeley, 1970)

The main issue of the 1960s became, in fact, the multiversity itself and what was considered wrong with it. 'The multiversity is a confusing place for the student', wrote Kerr, 'he has problems of establishing his identity and sense of security within it'. The multiversity could, in fact, be seen as no more than an unplanned conglomerate of a variety of institutions. Until the later 1950s it usually suffered from lack of funds, inadequate facilities, unsophisticated administration and uncontrolled proliferation of disciplines. The new stress on scientific research, the newly perceived national need for it, had led to a neglect of the masses of undergraduates. The multiversity seemed, in fact, to have strayed away from the central concept of American higher education. It no longer seemed a part of utopia; utopia could not consist simply of increased numbers (figs 1.1 and 1.2).

How could the multiversity's problems be solved? The answer was seen to lie in institutional diversity. Campus and college were understood as contrasting institutions. Campus entailed comprehensiveness and spread, while college stood for concentration and strictly limited size. As time went on, college and campus were also seen to complement each other, and finally there were the attempts to combine them. We may thus speak of a dialectic of campus and college. The multiveristy, would clearly be classified under campus. But if this meant that a 'campus' was increasingly associated with just accommodating numbers, one could expect a new attention to be given to the college by all those who professed to pursue quality. At the same time, the ethos of the general expansion of higher education would never be lost sight of.

LIBERAL COLLEGE TO STUDENT PERSONNEL SERVICE

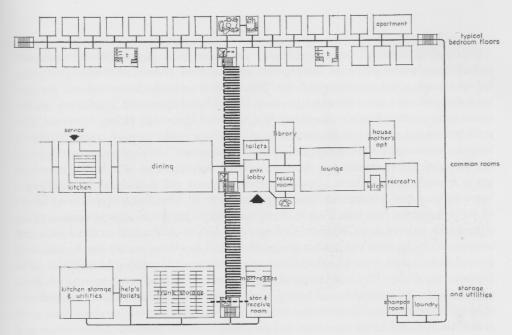
So far we have characterised the nature of the utopianist system of education as one that is open to the country as a whole. The individual utopianist institution, however,



1.3 College students (possibly in a 'Living and Learning Centre') c. 1960. (C. Ricker and F.G. Lopez, College Students Live Here, New York, 1961, p. 7)

functions rather by shutting itself off from its environment. This double-facing is reflected in the use of the cherished term community: it signifies both the wider locality outside the institution, and the institution itself, or more precisely, the shared aims, the unity of, and within, that institution. And yet, the remit of the college is broader than that of the university - or so it seemed from the standpoint of the defenders of virtues of the small college. Their fear is, as was alluded to in the Preface, the instrumentalisaton of academic training; to the ideologist of the small college, the danger of the multiversity is not just that of containing anonymous masses, but an excessively narrow vocational view of the acquisition of academic knowledge. Within the college the main task is often formulated as the inculcation of 'education', as well as, or rather than, the imparting of academic knowledge. Returning, however, to the larger issue of widening university provision as a whole, one of the problems which the following will be battling with is whether any new developments in college education should be instrumentalised again, and put into the service of the acquisition of academic knowledge in a larger institution, or whether college education should always be understood strictly as something that exists by and for itself. Put more simply, once again, the alternatives seemed 'training' the masses and 'educating' the elite (fig. 1.3).

The favourite term 'liberal arts college' is derived from Antiquity and the Middle Ages and perpetuates an expression most confusingly used in the English language. Only fairly recently the principal meaning of 'the arts' was changed to 'the humanities' and there are still arguments as to how much of the social sciences and even of the natural sciences should be included. The word that matters most in our context is 'liberal'. 'Liberal education' characterises the non-vocational branch of academe. Crucially, from the later nineteenth century onwards, this also entailed the notion of 'Lernfreiheit' (Clark Kerr), or electivity: the student could choose what to learn and was given part of the responsibility to structure his or her course. This, in turn, was



1.4 Schematic plan of an American residential hall 1947. (ARec 12-1947, p. 82)

linked to an ever greater emphasis on subjectivity, on the personality of each student, and on the individualised and intensive interchange between teacher and taught. By no means did this weaken the idea of a close community; on the contrary, a community would be strengthened through each individual's commitment to it. But it had to be small. A new, immense value was placed on the small institution provided this was coupled with a perception of quality. From the later nineteenth century onwards a number of colleges, especially on the East Coast, such as Swarthmore or Bryn Mawr, managed to keep, or even increase their social and academic standing, while, or even because of, remaining small and intimate. They always adhered to the label 'college'. 'Liberal studies find their greatest charm amid the old associations and their natural home in the peace of rural life'. This was a fortiori true for womens' colleges which 'courageously claimed a male preserve . . . that of the liberal arts college' and which 'shaped their communal life . . . and transformed their college landscapes into the settings of their own dramas of college life', to cite Helen Horowitz's Alma Mater, a richly detailed account of precisely those lives and landscapes in the East Coast women's institutions.

A two-fold development must now be noted with regard to the 'college'; on the one hand, small institutions found it harder to exist, and, especially in the period of the multiversity their numbers diminished. For instance, of the 300 womens' colleges in 1960, only 146 had kept their independence by 1973. On the other hand, major older universities of the highest academic reputation had begun to build sub-units from around 1900 onwards after the small college model, notably, Princeton, Yale and Harvard. At a time when these institutions as a whole could no longer be called a 'college', their 'residential colleges', or residence halls, provided some academic, and much moral tuition; their architecture, and the way it was meant to recall Oxbridge will concern us below.

Discussions about all aspects of higher education were gaining momentum and included the voices of major intellectuals, such as John Dewey, which, in particular, led to countless reformulations of the 'liberal' ideal and which carried on, virtually unchallenged, into the 1950s and beyond. They often began with a reference to the nineteenth-century English champion of a reformed Oxbridge, Henry Newman. The principal target was the instrumentality of the vocational: 'support [must be given] from a disinterested respect for the value of education . . . the ultimate criterion of the place of higher learning in America will be the extent to which it is esteemed not as a necessary instrument of external ends, but as an end in itself'. A major change, however, occurred within this movement around 1930. The retrospective trend began to be replaced by one which stressed the new. Now the term reform came into its own. Small, or very small 'Reform Colleges' not only took the lead in innovation but became desirable, even fashionable places to study. They were usually newly founded, or had been taken over by educational gurus, such as Alexander Meiklejohn (The Experimental College, 1932). Most of the movements did, however, perpetuate a hostility towards the new technical world, such as the group which advocated concentrating on the reading of the 'Great Books'. Others took a more 'modern' line, such as Bennington and Sarah Lawrence and preached an intensification of democracy and equality. Another important element was the search for more elaborate procedures in practising the life of a small community, in the 'communal expressive' group. A smaller group of 'aesthetic-expressive' colleges, to use another one of David Riesman's labels, such as Black Mountain College, of the 1930s, believed in the general educational value of personal expression through the fine arts and artistic crafts. Later on we shall come to find links, in some cases of the 1930s and 1940s, between educational reform and architectural reform. After World War II, the reformist message continued but was increasingly overshadowed by a dichotomy of the egalitarian aspirations and the elitist reality of the small college. The task, as seen by many, especially in California, was to incorporate some reform elements into the multiversity, especially the close teacher student contact, or the 'liberal education' kinds of subjects, for instance in 'General Studies' courses.

We have, however, not yet provided the essential characterisation of what happens in the college itself. In the USA, as in England, 'university' stresses the academic learning and research processes, while 'college' makes the point that all other aspects of a student's life are also catered or cared for. It is this care which grew into an enormous complex of preoccupations, shared by a number of agents, educational philosophers, administrators, psychologists, architects and others. Embracing it all was the continued concern for liberal educational values with the overriding goal of connecting all the elements into one great whole. To provide only one example of the innumerable highly charged social-moral formulations, taken from the bible on the subject, Nevitt Sanford's *The American College* of 1962:

The academic community must be an assembly of men and women humble enough yet secure enough to exhibit to one another their doubts, the weaknesses, and at times their wretchedness. This is the price of knowledge and truth... foster the understanding and the free but organised search for new forms of thinking and living, and you will be educating people.

It was the reform movements of the early decades and some of its leaders, such as

Theodore M. Newcomb, who helped to formulate the new methodologies of the post World War II concern for, and ensuing science of, college life. Basically, the concern for the student goes back to the kind of responsibility upheld by every traditional institution, the disciplinary one, to ensure the orderly behaviour of its inmates. One has to remember that, traditionally, the age of American students ranges between 17 and 21 years - 'most college students are adolescents' (Dugald S. Arbuckle 1953). A principal concern was for the student's 'mental hygiene' (used in 1953 without quotation marks), though this authoritarian attitude would rapidly diminish in the 1960s. But we must look for yet another major source for this development. It lay with the way post World War II academics generally insisted that nothing but rigorous scientific methods will do. The 'Student Personnel Services', as they developed from the 1940s to the 1960s, had to move into the scientific sphere, too. A language arose, sounding entirely professional and different from that of the earlier philosophereducationalists and different from the generalised rhetoric used by the college presidents. It was the discourse of the psychologist, in particular the behavioural scientist. Psychologists had moved away from moralising analyses of an individual's character traits and concentrated, instead, on his or her 'environment', or, to cite the college jargon, the 'press', meaning less the actual physical environment, but 'peer group influence' and the general mental atmosphere of the place. A new group of academic researchers then took these 'independent, situational variables' and treated them with much arithmetic and tabulations. A whole culture of student care arose, practised by professionals within the institutions, numbering thousands in all, and with their backup of a great number of researchers resulting in a vast body of publications.

It is important to note again that the student personnel services were strictly not concerned with the contents of teaching. However much their origin lay with the liberal educational ethos, they now sidelined an important tradition of that movement, namely the advocacy of the humanities for educational purposes, as well as the non-vocational stance of liberal education. On the other hand, this meant that the new 'services' operated for all students, they served all 'college men'. According to the faction of college psychologists, all students at one time or another needed their help. Thus one might even conclude that the student personnel service functioned as a genuinely new unifying element, it included everybody in the multiversity, and that therefore it did take the idea of the college, as togetherness, into the larger university, and therefore did help to reduce the gap between 'mass' and elite.

Against that, however, speaks the continuing proliferation and diversification of the groups serving the well-functioning of the college. 'The college psychologist helps the individual, the college administrators strive for order in the community.' Most evaluations of the student services reveal their straightforward instrumentality. Their chief purpose was, simply: 'the correlation between college press and productivity', that is, academic success and the prevention of 'attrition', or dropping out. While the investigations bristled with graphs and mathematics, the main conclusions were mostly of a devastating simplicity. For instance, 'freshmen-to-senior changes in several characteristics have been occurring in considerable uniformity in most American colleges and universities in recent decades'. The recipes, too, in the end, had to remain vague. A key term was 'fit': the correspondence between the college environment and the mentality of the student. Agreement could not be reached as to the degree of 'fit' which was desirable. The earlier radical reform college could aim for a strong lack of

fit, at least initially, so that the student's character and outlook could be changed and moulded into the desired direction. The psychologists of 1970, however, oscillated between concluding that too strange an environment would elicit resistance on the part of the student, with effects that were educationally counterproductive, and, on the other hand, that too close an initial fit would mean a lack of challenge and would elicit no change in the student's character at all. Indeed, it was said that 'the typical college graduate is a cultural rubber-stamp for the social heritage as it stands, rather than the instigator of new patterns of thought and new standards of conduct'. In other words, somehow, the reformist impulse appeared to have evaporated during the 1960s and the aims and the ethos of the institution college were less clear than ever before.

The college's concern for the lives of students was normally most wide-ranging. 'We house and feed them and find ways to teach them' thus President Esther Raushenbush of Sarah Lawrence, one of the most prestigious small womens' colleges. One should note the order of the tasks as outlined here. To take the second, virtually all institutions of higher education, anywhere, take the feeding of the students for granted. The vast majority also built facilities in the centre of the campus for further aspects of the social and recreational life of the students. In Anglo-Saxon countries these are usually called 'students unions', built and financed by the university, but often administered by semi-autonomous student organisations. There was never any argument as to their basic use and the need for them. However, their complexity increased during the postwar years; a great variety of 'campus centres' were created which catered for further cultural purposes; there was often a lavish 'arts centre', which of course, could be seen as the substitute of the old college chapel.

The major area of the college not devoted to teaching was the student's 'residence'. It has come to be recognised as the overriding characteristic of the Anglo-American college and university education as a whole. Until the mid to later nineteenth century this English tradition continued in America, but with the new wave of the publicly financed campuses of largely local or regional intake, as well as the influence of German university culture where the student residence was virtually an unknown entity, many American universities - as well as most of the English 'Civics' and 'Redbricks' - expected students to find their own accommodation. But from the midtwentieth century a vast number of student residences were again built, the College Housing Loan programme from the early 1950s made obtaining finance easier, and the Higher Education Facilities Act of 1963 further encouraged the construction of 'cheap shelter'. Total provision could, of course, only be dreamt of. Until the early 1970s precise figures seem hard to come by, but it appears that about half the American student population commuted to the university, while a further one-third, or more, lived in purpose-built accommodation, which was somewhat like the situation to Britain, although there the proportion of students living at home was much smaller (figs 1.4 and 1.5).

The very first American colleges included student residences just as their English models in an all-purpose building. Later on, during the eighteenth century, and departing from English customs, residences were usually accommodated in separate buildings. In his celebrated early nineteenth-century model university at Charlottes-ville, Virginia, Thomas Jefferson carefully coordinated them with all the other functions. On the average campus, however, residences occupied rather undistinguished,

barrack-like buildings. The traditional American residence thus moved some way away from its Oxbridge origins. Most accommodation consisted of dormitories – a term unknown in the university context in England – meaning long corridors, often twenty rooms on either side, with sparse sanitary facilities, each room sleeping two or more – single rooms remained the exception in the USA for a long time. There was usually no space anywhere in the dorms where the student could do his or her

There was a further element in the diversification of life in the college. From the affluent later nineteenth century onwards, students took their lives, so to speak, into their own hands, or rather, were helped by their parents and the alumni, who built for them great numbers of club-homes, called fraternities and sororities, which included dormitories and a great number of social facilities. A society within a society arose, entertainments of all kinds, initiation ceremonies, drinking, dating, useful contacts within the social elite. England had nothing to offer in comparison — although some aspects of student life at Oxbridge have been looked at and judged in somewhat similar terms — whereas the German *Studenten-Verbindungen* offer strong comparisons during much the same period (see page 208). If we include the vastly expanding facilities for athletics, which seemed to dominate life on the old campuses during the early twentieth century, we arrive at a description of life in the American college town in which student socialisation had become an independent entity.

But this is, of course, a later twentieth-century view. Earlier, the strong old moral-educational beliefs, combined with the stability of the hierarchical social structure would take this performance of the adolescent elite for granted. To the new educational-sociological and reformist kind of thinking the separateness of the old dormitories and the fraternities provided a challenge to devise a 'reintegration of curriculum and extracurriculum' (Brubacher and Rudy). The provision of the students' unions and campus centres mentioned above — a 'movement' which began around 1900 — were part of the attempt to re-include social and recreational elements into the centre of the university.

Around 1900 we also witness attempts to 'return' to the full scale Oxbridge College - in actual fact it amounted to a parallel with the new English concept of the student 'hall of residence', or, as the Americans say, 'residence hall', with just some academic teaching, as well as some 'moral' instruction. It began chiefly at Princeton, then took off at Yale after World War I and reached Harvard shortly after. Particularly striking and in many ways novel was the way in which architectural design was put into the service of the educational aims. As the architect, Ralph Adams Cram, remarked about his Princeton College in 1910: 'half college and half monastery', it 'sways men's minds and exalts their spiritual consciousness by means of the subtle influence of solemn architecture'. The attraction of old Oxford seemed overwhelming and the allegiance could not have been more outspoken at times: 'we seem to have added to Princeton the age of Oxford and Cambridge' (University President Woodrow Wilson). Harvard chose the term 'Houses' for its version of the college/residence hall, also arranging them on an open courtyard principle, though this time the style is not Gothic but an early Georgian manner which approximates the early buildings on the USA's oldest campus. Each of the seven Houses accommodates 400 students, with copious socialrecreational facilities, as well as those for teaching, directed by a House Master, an academic of some standing. The teaching is, of course, only supplemental to that in the main parts of the university. There was one major Oxbridge planning element adopted at Princeton and Harvard, the 'staircase principle', giving access to a smaller number of rooms – at variance with the traditional American dormitory access via corridors. Harvard's Houses remained models for the internal organisation of student residences for a long time while 'Collegiate Gothic' conveyed the image of a complete and integrated institution and was at times applied to a large campus, such as Chicago or Duke. Finally, it must be stressed that nothing of that scale and intensity was ever built in England itself (cf. fig. 1.7).

To obtain strong institutionality by means of strong architectural images was an important innovation, but one could not expect it to find widespread adoption, for reasons of simple finance, as well as for unspoken reasons of status. A more specifically architectural idea of the college will be taken up again with the Modernist style. We must here return to the kind of discussion about institutions to which the 'college' has been subjected so far. Research of the kind arising from, and used for, the student personnel type services was, of course, also conducted for student residences, though not much of it appeared before about 1970. Investigations concentrated on the internal world, the peer group issues, or questions as to the allocation of applicants to specific residences or problems of coeducation. From an English point of view there seems to have been comparatively little research on socialisation for its own sake. The crucial question for our context, was, however, the relevance of student residences for the campus as a whole. And here we begin, again, to encounter hesitation. The major comparison was between students in residence and those commuting, and whether this was making a difference in academic attainment. It was estimated in 1977 that 'residence adds about 12 per cent to a student's chance of persisting in college and graduating'. In a summary of the research of two or three decades we read vaguely that students in residence are more likely to change their attitude, beliefs and values than those staying at home, but students 'do not perform better academically'.

There was always a very general agreement that more residences were needed and through the whole of university and college expansion the proportion of residences kept pace. But there were also many kinds of dissatisfactions and disagreements. The English ideal was venerated, but ultimately considered as too expensive for the USA. Occasionally, the English mode was felt to offer too little: 'For education to take place, faculty and students on campus must be involved in activities important and rewarding to both. Coffee and doughnuts will not do; and no improvement is to be gained from switching to tea and petit fours.' In 1963, the campus planning expert Richard Dober, tells us that the importance of residences in general is 'still debated'. Some objected outright to student residences, namely those who felt comfortable and independent in the fraternities and sororities. Brubacher and Rudy, in their comprehensive history and analysis concluded that educationalists still needed to find 'a way to integrate more closely [the American residences] with the educational objectives of higher learning'. The tail end of an old phenomenon coincided with the beginning of a new phenomenon, the new 'student culture' view of independence. It must be noted, though, that the strength of the residential tradition in America prevented the radical rejection of university-organised student residence as we shall witness it in 1960s West Germany. Some tried a pluralistic solution - students could stay in the

dormitories according to the rules set by the institution, others may live where they can do as they please. Special groups included graduates and married students (beginning around 1960); the issue of the coed dormitories was first noted around 1960; there were the ethnic minorities in 'bi-ethnic dorms' and there were 'Theme Houses', i.e. halls for international groups of students. Residences now had to suit particular groups. At the same time new variations of academic supervision in hall kept springing up. According to Riesman, Michigan State 'pioneered' the 'living and learning unit' in the early 1960s.

Another version of the institution was the community college, a new name for, and an expansion of, the junior college, catering throughout for a lower class of degree and for a strictly localised area. Politically, there was unilateral support for this extension of higher education 'downwards'. The number of community colleges grew substantially, particularly from the late 1960s. Between 1973 and 1980 alone student numbers doubled. It was seen, however, as a borderline type of college: 'more than a high school, less than a university'. A community college was not a college, strictly speaking, as it did not normally include student residences. On the other hand, 'because much of the social life of the living-in college is missing', there had to be a special emphasis on the communal student facilities of the 'union' kind mentioned above, located in the centre of the complex. On the whole, because of a lack of complexity, this type of institution did not take part, so to speak, in some of the debates conducted here. And yet, the new proliferation of the term college revitalised this venerable institution and supplemented its old elitist image. 'Community', too, was invigorated, in two senses of the word, as a self-contained institution and as a service for the locality around it.

What emerges from this section so far is that the definition of the American 'college' had become increasingly blurred. Its older chief aim, 'education', became ever more difficult to define. Its 'true' American version was that of a completely self-contained institution which is both a small university in the fullest academic sense of the word and a fully self-contained living unit, at least as far as the students are concerned. At the other end of the spectrum is the plain block of student dormitories with some 'built-in' supervision facilities. However, following the sketch of the college we must return to the chief issue of this book, the university as a whole. In the old days, the American college was identical with the American university. At least from the beginnings of the multiversity onwards this was no longer the case. Moreover, during that period, as already mentioned, many small colleges folded or were amalgamated with larger neighbouring institutions. On the other hand, there was a mushrooming of diverse sub-units on the larger campuses which contained at least some elements of the old college type. There was one attempt, the last, one is tempted to say, at a rational combination of college and university: the Cluster College, or Satellite College, where a number of residence hall units are grouped around a larger 'university center', serving major communal functions, postgraduate students etc. A start was made in the 1920s in Claremont, California. The most sophisticated effort of this kind, the University of California Santa Cruz group of colleges, will concern us below.

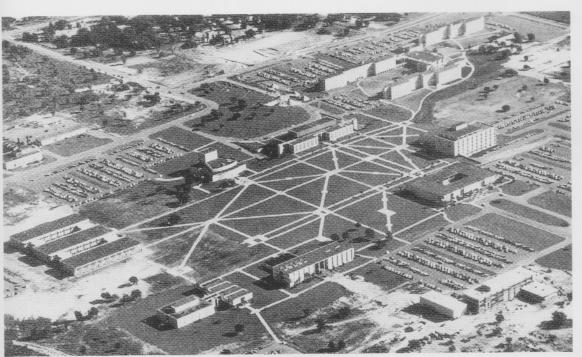
Unity and a strong institutionality are what we have been looking for. 'Multiversity' denotes diffuseness, but 'college' by this stage, during the 1960s, becomes very imprecise, too. What was it that chiefly created the unity of the whole institution? According to Brubacher and Rudy, 'the characteristic expression of [the] new concern

for the "whole student" and for the establishing of a new unity in the American college [which here includes, of course, the 'university'] in the twentieth century came to be the student personnel movement'. But they conclude their account on this topic with a sceptical note: 'There is no question that the American college student has become . . . the most thoroughly guided and counseled student in the world'. Doubts had, in fact, set in as to whether 'student moral educational and psychological guidance' was the institution's most useful aspect or function. The old educational morality which held the institution together, was no longer strong. The characterisation of the student personnel services above as 'instrumentalist', i.e. as aiming chiefly at maximising degree performance, left us in doubt as to whether they were really that much concerned with the institution as a whole. It was found, in fact, that the unifying ideal of the liberal arts college or university had been divided into the concerns of a number of separate professions. Was there still a desire for unity? If so, who could help to bring it about? We shall now turn mainly to plan and architecture. Did those professions compete with, or against, the educators and psychologists in the search for unity or did they all work together? How much advice could a designer gain from the study of the pronouncements outlined so far? A statement by David Riesman, when summing up the Harvard Houses under the heading: 'Some Utopian Conclusions', may make us doubtful: 'Unfortunately we know no formula for determining optimal community size', perhaps not a profound remark, but certainly a perceptive one.

CAMPUS PLANNING

The protracted search for the unity of the institution of college or university can be brought to a conclusion through the use of a single term: campus. First met with at Princeton University in the late eighteenth century, the Latin word campus, meaning 'field', became common as an expression for an ensemble of buildings (usually) for higher education. Thus campus indicates primarily a location. The term underlines the self-containedness of the institution and thus its separateness. Often a campus is situated on the edge of, or outside, the town. Obviously, a campus could not exist without the institution, be it 'college' or 'university', yet the independence of the term 'campus' often appears strong. Through time, 'campus' assumed something of the meaning of an institution itself.

For Turner, campus planning is a thoroughly 'American tradition'. The initial layout of a set of buildings of any kind in an American town differs substantially from that of most European ones through the well-known facts of spaciousness and rectiliniarity. Early American colleges and campuses invariably consisted of a number of blocks, at right angles to each other; the nearest European equivalent was perhaps a group of barracks, placed on the edge of a town. 'Architectural' treatment consisted of the time-honoured Western fashion of marking out the central block with some ornamental features. During the nineteenth century the single, but complex palace became the preferred model for a new college. It was around 1900 when more conscious attempts were made at a visual planning of the many new large universities. As for exhibition design and town planning (the 'City Beautiful'), the American version of French 'Beaux Arts' planning became the model for higher education and, coupled



1.5 University of South Florida, Tampa, begun 1957, view of c. 1964. (Ross)

with the help of the new and much more impressive ways of the pictorial representation of the projects, stupendous campuses were devised. A multiaxial layout and the careful scaling of the height of buildings, together with central public spaces and sensitive landscaping provided a hitherto unknown sense of visual unity.

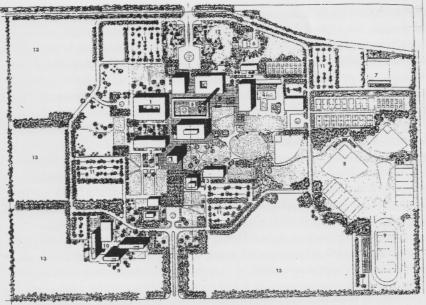
Between the wars there followed a hiatus in grand campus design, while architectural and planning interest was centred more on smaller-scale collegiate buildings. The first beginnings of International Modernism were, as we shall see, smallish, but during the 1950s, as Turner demonstrates, a bolder Modernism in East Coast universities, particularly at Yale or Brandeis, was coupled with the conviction that a good campus can consist of a number of diverse architectural masterworks and with a distrust of 'grand' planning and Beaux Arts uniformity. Wherever the situation allowed it, an overall low density was preferred, with plenty of greenery, corresponding to new international trends in town planning. Modernist designs in cheaper institutions generally seemed to go for a plain rectangular slab block, often multistorey, that fitted most purposes; on the other hand, new kinds of special purpose buildings, especially for the sciences, had to be devised. Meanwhile, the multiversities grew more rapidly and coherent plans became harder to uphold. There was an increased need to plan for extendibility. In some cases, such as at the University of South Florida, this led to a way of leaving vast spaces around the initial buildings, to be filled gradually in years to come. One of the major new problems was automobile access. Less visible manifestations of new technology were the new 'teaching machines', i.e. audio-visual aids, as well as computerised central timetabling (fig. 1.5).

University planning became more than ever before an organisational, technical process. Modern town planning thinking, as developed around 1900 in Germany and the USA, especially the idea of the careful division of functions ('zoning'), had entered

the university world for some decades and many institutions had devised 'master plans' for future expansion. But by now the old days appeared to be characterised by 'hit and run techniques', 'educated guesses by the president or the board of trustees', or by academics who thought that a Nobel prize in chemistry enabled them to act as architects. Older universities, like Harvard, could now be dubbed 'a loose confederation of departments held together by the allegiance to the central heating plant'. From the late 1940s, increasingly, a full-time member of the administration became responsible for campus planning, an agency that could later be subdivided into 'programme analysts' and 'space experts'. We thus meet another group of specialists in the field of creating universities. They, too, created their professional bodies and research groups, such as the Society for College and University Planning, a subgroup of the American Institute of Architects (AIA) or the New York based Educational Facilities Laboratories Inc., supported by the Ford Foundation, as well as consultant firms, such as Dober, Walquist and Harris Inc., of Boston. In 1963 its Richard P. Dober laid down the new science in his comprehensive work Campus Planning.

Utmost rationality pervades all their considerations. 'Campuses grow by logical building increments'. The main steps in planning entail a translation of quality and quantity of need (strictly divided into diverse functions) into space requirements, or 'planning modules'. Each major teaching unit, as well as communal and administrative functions, will be accommodated in its own distinct building and on a distinct part of the campus. Then there is the given, the site, a minimum of 400 acres (161 hectares). 'Relatively flat' sites are best; Dober assumes that normally several sites 'will present themselves for comparison and selection'. Roads are divided into major and minor ones and the campus as a whole is circumscribed by a ring road. There has to be a certain proportion of open parkland and a staggering amount of parking space; 'UCLA is a four-year university - or five years if you park in Lot 32' (Bob Hope). The key international Modernist term 'space' plays as yet a subordinate role: the buildings, the 'physical elements' of the campus are primary, 'the circulation systems are subsidiary considerations' - although there is an emphasis on the pedestrianised central area, or 'pedestrian precinct' for its own sake and Dober shows his sensitivity in the way he pleads for a 'gradual pedestrian-scale transition from parking lots to campus buildings'. Above all Dober insists on greenery. Members of the university 'need physical and psychical relief from the demanding and occasionally restricting communal life'. Residences are invariably located at the periphery. Dober reaffirms his allegiance to zoning: 'rarely do people eat, sleep and work in a single environment' and even as regards the diversified student residences, for singles, married couples etc., he advocates separate locations, as the 'social and living patterns of each group might be in conflict' (fig. 1.6).

Once all this is established, we can look at 'the planning module as a chess piece and the campus as a chessboard. Each move has consequences for all other pieces.' Yet, this metaphor is not pursued, for obvious reasons, because unlike chess, nothing ever drops off the plan of a campus. The ultimate aim is, in fact, 'to bring all things forward into balance'. This balance consists mostly of a straightforward concentric scheme, from the 'academic centre' to car parks at the periphery. Once it is all put together, then the campus, for Dober, is complete, 'final'. Dober's vigorous drawings, half life-like, half schematic, carry a considerable conviction of visual unity and are to an extent reminiscent of the Beaux Arts approach; of course, Dober has abandoned

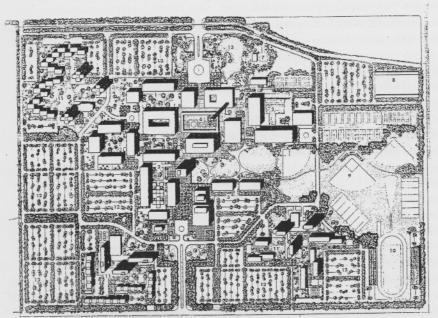


- 1. ACADEMIC CENTER
- 2. SCIENCE CENTER
- 3. ARTS CENTER

PHASE I.

- 4. PHYSICAL EDUCATION CENTER

 CAMPUS MASTER
- 5. CAMPUS CENTER
- CANADIA DECIDENC
- 7. CORPORATION YARD
- ATHLETIC FIELDS
- 9. STADIUM
- 10. STUDENT HOUSING
- 11. PARKING
- 12. LAKE
- 13. FUTURE USE



- 1. ACADEMIC CENTER
- 2. SCIENCE CENTER
- 1. ARTS CENTER
- 4. UNASSIGNED CENTER
- 5. PHYSICAL EDUCATION CENTE
- THISICAL EDUCATION CE
- 6. CAMPUS CENTER
- CAMPUS RESIDENCE
 CORPORATION YARD
- 9. ATHLETIC FIELDS
- 10. STADIUM
- 11. STUDENT HOUSING

13. LAKE

12. PARKING

ULTIMATE CAMPUS MASTER PLAN

1.6 R. Dober, from *Campus Planning*, New York, 1963 (showing, bottom, Sonoma State College California, Master Plan, by J.C. Warnecke and Associates).

Beaux Arts historical styles. 'It is not usually necessary to establish . . . illustrative three-dimensional designs for typical long-range plans'. 'The planning module *may* imply preliminary architectural design' (my italics). In the case of residences, it is enough to 'express' them in 'density, acreage, floor area ratios and building heights. These controls are sufficient to establish a design structure. . .'. The word 'aesthetics' crops up furtively in some places. Dober feels that he does have to provide a quasi architectural theory because his clients invariably entertain images of historic campus architecture. He therefore distinguishes between 'campus form', which comes about through planning, and 'style'. The latter has to be understood 'as a family resemblance among a group of buildings'. Dober mentions many styles, and only very hesitantly recommends Modern. Modestly, yet explicitly, Dober concludes that campus planning must be seen as a distinct stage in the process of building a university: 'The recognition of what has to be done to solve the planning problem is no less a professional skill than solving the problem itself [i.e. finding the detailed design solution]'.

We are therefore hardly surprised that Dober's work was not, seemingly, taken up much by the architects with whom we are going to deal, nor does Dober link up in any way with the other discourses cited so far; the term education is hardly given prominence in his book. His concern is for the practical functioning of the institution. For him there is little that links 'social phenomena', educational programmes, or the curriculum, and planning. I write as a general practitioner in the art of planning. I am not . . . an educator, nor a scholar. I am giving a . . . view of how campuses are being developed and how present techniques might be sharpened for better results.' 'Results' are, we presume, defined, again, as relating to the good academic performance and the 'processing' of students. We meet, once more, a strictly instrumentalised approach; 'campus planning' does not really profess to be concerned with an notion of the institution as a whole.

ASSIGNING ARCHITECTURE'S ROLE

The remainder of this chapter should deal with the question of whether, and, if so, to what extent, architects helped to devise integrated institutions in the post World War II period. So far, we have stressed a growing separateness of the professions in our field. On first impressions, architecture was no exception. As we saw, Dober even kept planning and architecture apart. The other professions showed little regard for what a campus looked like. 'The architecture of buildings' is a brief entry, incongruously formulated - at least to Modernist ears - in the index of the foremost sociological study of the American reform college by David Riesman. In the behaviourist-psychological literature references to architecture virtually never occur. As we saw, the term 'environment', and even 'plan' or 'design', usually referred to people rather than buildings or spaces. By 'aesthetic experience' writers normally meant the teaching in the visual arts. There was the odd comment that architecture is 'expensive'. We may even read a council that 'energy should be directed not to plant, development, buildings and facilities, but to relations between teachers and students and to the expectations and the conceptual framework which influence the way they work together'.

In those cases where architecture was mentioned by non-architects, and its impor-

tance admitted, its purpose appeared strictly limited. Clearly, everybody had to recognise the effects which college architecture was capable of. Historicist architecture from the later nineteenth century onwards showed 'aesthetic and social purpose . . . [and leftl an impression of a society apart, transmitting a sense of consecration by "the mysterious guidance" of the associations of the place'. 'My . . . imagination had conceived a college as an assemblage of Parthenons and cathedrals', ran the traditional comment of an alumnus. It may well have been that by 1960 or 1970 many of the modern psychologists and sociologists thought that typical rich American college architecture was 'tasteless and imitative' (David Riesman, 1962). But old attitudes prevailed: 'Alumni are concerned about architectural style, symmetry of building placement, attractive appearance, well kept lawns and preservation of monuments' (J.D. Millett, 1962). Decades later we may still find slight sarcasms, such as calling architectural efforts 'monuments' for university presidents, donors and alumni and 'architecture' still appears as just one among many rubrics concerning university buildings, together with 'flood plan' or 'parking'. Seemingly, matters of aesthetics can be strictly controlled. In the case of publicly funded universities we find that 'the state's art and architectural board reviews [the plans] . . . for the governor's office . . . This independent board . . . typically consists of five members, an architect, an art historian, an artist, a representative of the state's museum of fine arts . . . it is primarily concerned with aesthetics, that is, the exterior of buildings . . . Since all members are well-trained professionals and experts in art and architecture, there is usually a consensus among the board.' Another typical formulation, indicating the separateness of the architectural, it was pronounced in a programme for Chicago Circle in the early 1960s: '... full attention [would be] given to aesthetics and economy'.

The contrasts of these quotes with the Modernist and later discourses used by the architects themselves and their critics could not be more striking. However, it must not be assumed that directions are entirely clear among the latter, either. Architectural discourse with regard to university buildings was in itself quite varied. Some of the Modernist campus buildings by the country's most avant-garde and most prestigious practitioners, such as Eero Saarinen's, Gordon Bunshaft's, and Paul Rudolph's at Yale, ultimately belong to the category of the single, impressive building, they were the new towers and porticoes. A rousing short admonition in the Architectural Record by John Knox Shear fits in with this line: 'Students . . . [are] impressionable because they are socially unsure, intellectually curious, and generally eager to accept whatever has the approval of an authority presumed to be sophisticated. He thus felt confident to demand 'experiments in planning and design'. A crucial element in strengthening the authority of the designer is the fact that in a university 'the acreage is large and the authority over its use is almost uniquely single'. Shear mistrusts the trustees', i.e. the clients and their 'righteous double talk of economy and tradition'. There is a special reason for trying to influence the students, for 'today's student is tomorrow's trustee'. Only at the end Shear refers to the actual purpose of the institution: 'universities should build in the spirit they teach'. We shall describe below the way in which a similar but much more comprehensively orchestrated campaign in the Architectural Review and the Architects' Journal launched the architects' platform in English new university building. A few years later, the American Institute of Architects (AIA) again took concerted action to drive home the importance of their profession in university planning and design. Now the approach is virtually the opposite to Shear's in

1957: utility and economy were the watchwords. Answers to a questionnaire sent out by the AIA to university presidents revealed that 'beauty' came way down in the order of preference. Planning by architects leads to 'rational, justifiable and secure decisions'. By 1970, we may read the opposite again with the call to abandon the 'exclusively . . . utilitarian standpoint . . . Campus aesthetics has become a top priority'.

A more circumspect formulation of the relationship architect-client was prepared by a new executive body, set up for the rapid extension of universities in the State of New York (the 'SUNY' system). First it created, in 1962, a new 'autonomous' organisation, the State University Construction Fund, headed by one of the most powerful figures in American politics, Governor Nelson Rockefeller. The Fund was meant to bundle together all activities, from raising the money, to planning and building. The uppermost of the stated aims was efficiency. After speed, architectural quality was the most frequently underlined objective, and a certain reliance on the designers, that is, the 'total professional and building services' was advocated. To achieve it, 'a system . . . was set up to promote full utilisation of the capabilities of the design professions . . .'; clients should formulate their demands 'flexibly', so as to 'permit creative freedom'. There should be no divisions between planners and architects. On the other hand, there is a continuous stress on 'the rational procedure' which 'avoids incidents of trial and error'; 'decisions [were] to be made concurrently, rather than in time-consuming sequence'. The Fund itself chose a 'different design vocabulary' for each campus, 'for the guidance of the designers'. The process of choosing the architects, not very clearly explained by the professional journal, was to involve those 'of demonstrated ability', those 'who produce high quality'. Following Samuel E. Bleeker's account, it was, indeed, the governor himself who 'fought' for architecture. In his thoroughly traditional understanding of art patronage (whereby 'art' included Modernist art) Rockefeller held that 'architecture' costs extra money and this also entailed the conviction that 'fancy' was not normally needed for Welfare projects, such as public housing, but that universities did need it. Rockefeller was convinced that to 'bridge and highway builders sensitive design was foreign', while the private architect 'needs autonomy over his or her design', and that this 'kept the best architects from state projects'. In early 1963, in an extraordinary attempt at, so to speak, the private initiation of state patronage, Rockefeller invited sixty of 'the nation's top architects' to his mansion to show off his own interest in modern art and to 'work his magic' to convince them to design for his state campuses. Indeed, gradually the elite of the East Coast designers did join, though mostly just for individual buildings (see below page 42). Was one of the underlying motives the unspoken competition between SUNY, the New York State organisation and the massed and powerful private institutions of the East Coast (figs 1.19 and 1.22)?

It thus appears that the architectural discourse differed strongly from the others in higher education. It was more strictly evaluative and usually proceeded by a high degree of selectivity. In architecture, the chief traditional principle was now to select according to notions of 'artistic', or 'aesthetic quality'. In order to arrive at a broader and fairer assessment of layout and design, literally each campus ought to be examined by itself, especially in respect of the chief issue here, the relationship between the design and the utopianist-institutional concept. The complete freedom with which institutions can be founded, which we postulated at the outset as one of the characteristics of the American 'system' makes it likely that even an academically obscure

institution could come up with unusual planning solutions. In practice, we have to adhere to a selection that was made at the time by a self-appointed, nationwide, even international architectural establishment. The choice of the post World War II buildings in Turner follows virtually entirely from two of the four major American architectural periodicals, Architectural Forum and Architectural Record. Ostensibly they address the profession but in the way in which they concentrate on short texts, splendid drawings and striking photographs their chief aim was more likely to help with convincing the prospective client. The architects, in turn, would maintain that the clients do not have much intrinsic understanding of architecture and that what the administrators and the money-givers were primarily after was attractive drawings, 'the desire to make a modern building resemble an illustration from a history book' and to 'design a pleasing facade and devise the interior into suitable cubicles'. When President Johnson addressed the American Architects' congress of 1965 he pleaded 'may your success be so great that ours will be remembered as the Age of Beauty'. We are witnessing here a way in which the understanding of architecture in the USA differs from that in contemporary Welfare State Britain, in Germany and even in Canada, at least as far as our field of higher education is concerned. Individual, instrumentalised professional interests vs. utopianist 'wholeness' continued to be an issue.

INTERNATIONAL MODERNIST COLLEGIATE

This brings us, of course, to the heart of what Modernist architecture was supposedly about. In our earlier deliberations about the nature of the American college, specifically architectural issues, as well as designers, seemed to play only a subsidiary role. It is characteristic that in the discussions about many Modernist buildings it is the architecture and the designer who seem to play the key role while all other issues and agents seem subsidiary. This is due to the way in which most Modernist architects claim that it is they who cater expertly for all conceivable aspects and that their style and their procedure is what creates the unity of all the efforts within the institution. The history of Modernism in architecture is treated by American architectural historians as diversely as elsewhere, from hailing its identity with the postwar effort and positive American values to associating it with American imperialism, to, lately, a virtual silence (Dell Upton), as well as restatements of Modernism's utopianist wholeness (Harries). In an older history we read that, by 1960, Modern architecture's 'aesthetic ... victory was complete ... there were hardly any enclaves of the old eclecticism' - somewhat late, one may say, although we shall see that English university architecture was even less 'advanced'. Turner is much more cautious, claiming that there are several diverse strands in that movement. Moreover, he is often at pains to link its concepts of planning back to the 'American tradition'. Briefly, one may distinguish four major divisions in Modernist university architecture: the expensive single-purpose structures by the internationally recognised masters, usually in the toprank institutions; the more utilitarian solutions up and down the country; the very large unified campus buildings and the small and more informal groups of chiefly residential units. The centre of this last development lay, from the late 1930s, with Walter Gropius, who had been called to teach at Harvard in 1937.

The Bauhaus, undone by Hitler, lives a flourishing life in America' (David Riesman). Some have interpreted this episode as a purely European import; others

stressed the way Americans were quickly assimilating foreign trends. There is, in fact, a complex relationship between Modernism and previous modes of Anglo-American college architecture. In what must have been a rather courageous line to take in 1952, at the height of the first flourish of Modernism in New England, MIT architectural historian Albert Bush-Brown drew close parallels between two seeming adversaries, the Neo-Gothicist Cram whose college buildings at Princeton have been mentioned above, and Walter Gropius. 'Both Cram and Gropius believe that their architectural missions are profoundly cultural . . . Both [are] the best exponents of the interrelation between educational and social philosophy and architecture.' Moreover, Gropius - in spite of his frequent chiding of nineteenth-century eclecticism - actually shared a certain kind of Medievalism with Cram: 'Their mission' Bush-Brown continues [is] to create that unity which was characteristic of the medieval craft community'. Both Cram's and Gropius's enthusiasm ultimately went back to the Romantic movement, from which two lines can be drawn, an English line, to Cram via Welby Pugin, who first dreamt of a socio-architecural revival of a medieval college or almshouse in the 1840s, and a German line extolling the togetherness of designers and craftsmen building the cathedral, its last showing was in the 'cathedral' of Gropius's Bauhaus Manifesto in 1919 (figs 1.7 and 1.8).

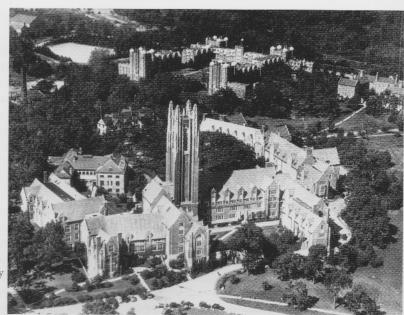
What was striking was the link-up between American reformist colleges and the new European Modernism. We cannot explore fully the complex twists of the 'progressive' vs. the retrogressive/anti-technological. Gropius heavily contributed to these twists in the way he chided the American Neo-Gothic colleges for their pastmongering. To the Americans this seemed to go along with the way they traditionally perceived the German university ideal as instrumentalist-technological; while their's was the American-English 'liberal', 'humanist' ideal. The 1930s American college reformers were mostly adhering to the latter. But Modern vs. traditional higher education was not the principal issue. The fact was that the 'German' educational thinking that came with Gropius's Modernist architectural-social ideals had virtually nothing to do with the German university, past or present. The origins of the educational philosophy and the practical experiments which emphasised learning by doing, by experiencing, rather than by training the memory, go back to the early nineteenth century, to Pestalozzi and Froebel; as Bush-Brown emphasises, 'Americans [had] visited the same Swiss schools . . . from which the German educators . . . and ultimately Gropius got their ideas'. German-American exchanges continued after World War I, between, for instance, the educational philosophers Georg Kerschensteiner and John Dewey. A new early twentieth-century kind of institution, the Landschulheim (or Schullandheim), i.e. high school courses conducted in country isolation, might well be likened to the liberal college ideal, especially in the way in which great emphasis was laid on mutuality among pupils. By 1948, Harvard President James B. Conant, who had been instrumental in getting Gropius across (his own study of German higher education going back to 1927) attempted to give the relationship between liberal education and the 'modern world' a positive turn: '... by relating their educational undertaking to ethics, the welfare and body politic, and the emotional stability of the individual, humanists [i.e. supporters of liberal education] can make an overwhelming case for the importance of their mission'. It is thus possible, in a complex way, to stress elements of continuity between the liberal / historicist collegiate and a new Modernist collegiate.

Meanwhile, crucial changes had occurred with the layout of educational buildings. Modernists replaced the great theme of the 'monastic' mode, the courtyard, with the plain rectangular block. This was the result of scientific and practical considerations, largely those of creating maximum light and fresh air for all occupants. For student residences it appeared a straightforward solution - not all that different from the traditional American dormitory block, in fact. For some designers of the interwar period this slab block, however, also provided a starting point for a complex coordination and linking of the blocks by low passages. We can begin with Gropius's first educational projects in the mid-1920s, such as the Philosophische Akademie at Erlangen, a short-lived reformist institution where the clients' and the designer's task was to 'create the architectural conditions for a community in which work and life come into close connection'. The Bauhaus building in Dessau brought a more complex, as well as compact, version of this proposition. In the mid-1930s Gropius practised it again in England, at Impington Village College near Cambridge (in actual fact a special kind of secondary school) for the educational reformer Henry Morris. There is a 'sense of congruity between form and social intention: the relaxed grouping of class room, community space and shared hall' (Andrew Saint), the latter, the wedge-shaped auditorium, had by now become a trade mark of International Modern. The inclusion of informal curved elements perhaps followed Le Corbusier's 1930 Pavillion Suisse hall of residence in Paris (fig. 1.8).

A number of small, more or less reformist East Coast colleges took up the new style, or were at least planning to do so, in the late 1930s. During 1937–8 Gropius was invited, with Marcel Breuer, to submit designs for arts centres at Wheaton College, Norton, Massachusetts and for William and Mary College at Williamsburg, Virginia. Modified versions of the Impington plan were supplied. By those years, a number of American designers also supplied similar Modernist designs. Another competition of 1938, for Goucher College, Baltimore, Maryland, demanded a design which 'should reflect progressive principles in education'. Built after World War II (by John C. B. Moore and Robert S. Hutchins), its Modernism consists in the relatively unaxial grouping of buildings and the lack of historical style references. In 1939 Gropius planned a more complex version of Impington for Black Mountain College, Lake Eden, North Carolina, the most artistically-minded of all the American colleges, and

a Bauhaus exile stronghold.

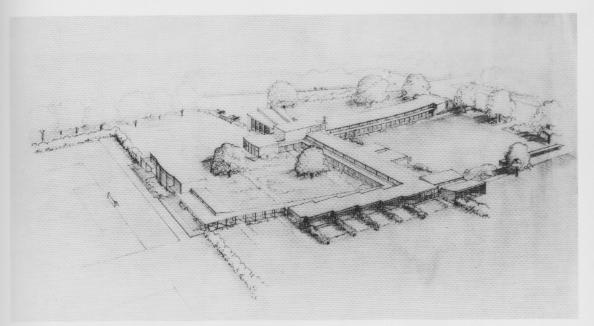
Gropius's major work in this series (with his firm, The Architects' Collaborative, or TAC) is the Harvard Graduate Center residence hall of 1950. Considering its average size, bedrooms for 575 students and associated canteen and club rooms, and the way it was built exceptionally cheaply (at a quarter of Harvard's normal costs), the Graduate Center attracted an extraordinary amount of interest. It consists of the usual assembly of low slab blocks, but they are now more carefully linked by way of bridges and covered pathways. The main communal block is slightly emphasised by a curved plan and different window formations. The overall layout now marks out more carefully the circulation patterns and the photos of the period stress the complexity of views through the whole group. 'Space' becomes a major term in the discussion; 'flowing space', the 'merging of spaces', the attempt to enhance the outside areas of the building, to emphasise the communal areas, the 'outdoor living rooms', which keep to 'a reasonable human scale'. Gropius, as usual, was ready with a full-worded statement about the links between architectural and socio-educational factors: he



1.7 Wellesley College by Day and Klauder, mainly 1930s. (Courtesy Wellesley College Archives)

talked of '. . . the philosophical concept of communal living, of co-operative activity and of interchange of ideas' and declared that 'living in this kind of a group of buildings, a young man may unconsciously absorb ideas and principles that would seem abstract and remote in the classroom, but which, translated into concrete, glass, light and air assume a convincing reality'. Gropius still felt he had to defend his Modernist style against the imitators of the past; on the other hand he prided himself on taking up some of the visual qualities of Harvard's traditional 'yards': 'As orderly as the original Harvard Yard, and yet as free and easy-going as a modern community centre' (fig. 1.9).

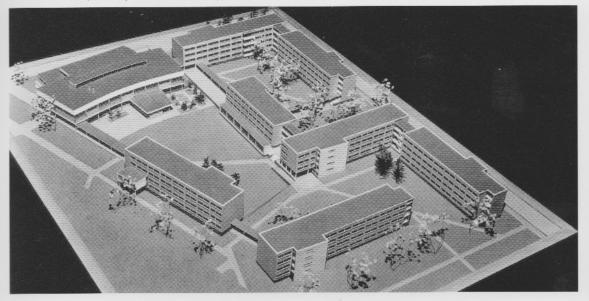
Gropius and his TAC henceforth designed a number of intricate schools and university buildings worldwide, but none of them were as ambitious as the University of Baghdad, planned from 1957 but not completed until the 1980s. There was very little indication from the client as to what was required and thus TAC felt they had to start from scratch. On a sizable campus, 2 by 1.5 kilometres (1.5 by 1 mile) and 8 kilometres (5 miles) from the city, the target was 12,000 students. There is a new element of flexibility: the major teaching facilities were to be housed interchangeably, in an attempt to facilitate contacts between disciplines. The first project of 1958 contained a novel solution of the parking problem - the elevated central piazza. The great hall, the administration tower and the purely ornamental gateway arch appear fixed and grand. But the overall plan shows neither the axial order of the Beaux Arts and early Modernist manners, nor the freer, but still rectangular grouping preferred by Dober. Instead, we note a loosening of the right angle, almost, one might say, a random grouping, if it had not been for the dense togetherness of the individual complexes of teaching or residential blocks. The term cluster comes to mind, proposed by Peter and Alison Smithson in England as early as 1957, to which we shall come much further on in this book. There is, however, a special reason for the high density: the close proximity of all the buildings was to help with keeping out the burning sun. These climatic



1.8 Impington Village College (Cambridgeshire) by Walter Gropius and Maxwell Fry 1938–40. When Gropius moved to England he developed a version of the International Modern style which does not squeeze individual functions into preconceived blocks (cf. 1.19) but accentuates them individually by spreading them out. The layout then stresses the links between them, much in the manner of the nineteenth / early twentieth-century collegiate plan. (British Architectural Library London)

concessions and the onion shape of the mosque appear to be virtually the only 'Arabic' elements in the design. For Gropius the strong contrasts of light and shadow cause 'significant rhythms', which 'tend to express the meaning of universitas, which is "wholeness", offering a creative setting for a fully, well integrated life for the students'. Later on Gropius's explanation is even more simple: 'As a whole the university is the

1.9 Harvard University Graduate Center, student residences and common rooms by Walter Gropius/The Architects' Collaborative, 1949. (Courtesy Harvard University)



chief problem of modern society, which, quite simply, consists of education'. Widely published at the time, with distinctive, perspective views, Gropius's design for Baghdad was perhaps the most important project of its date and had possibly more influence overseas than in the USA itself (figs 1.10 and 1.11).

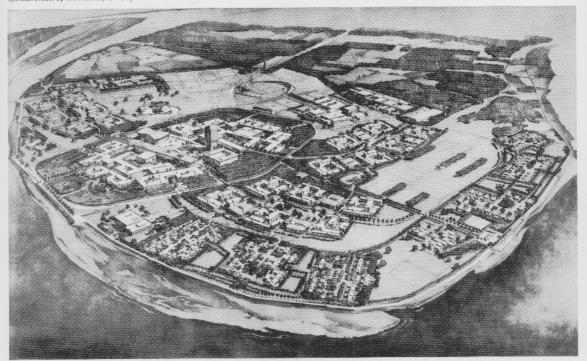
From about 1960 we find a large number of groups of student housing by most of the eminent designers, especially in the prestigious universities. Gradually, the straight economic slab block of the 1940s to 1950s went out of fashion. As in contemporary Oxbridge, a group of residences seemed a good use for an alumni donation and could be added easily to the already diverse campus buildings. There is always an emphasis on communal spaces. But the way this is done varied tremendously (fig. 1.12). One of the most serious-minded solutions were the Erdman Hall Dormitories of Bryn Mawr College, Pennsylvania of 1960-5 by Louis Kahn. This is a strict geometric expression of centrality on a plan which made it possible to provide almost wholly self-enclosed and ample interior lightwells as communal spaces. In some ways another extremely well-known group, the versatile Ecro Saarinen's Morse and Stiles Colleges for Yale of 1960-2 is the opposite, a wildly irregular layout, creating a number of leafy semi-courts, with communal facilities at the 'hinges'. Here there are twelve individually shaped rooms per staircase on the Oxford model (which, of course, was, by then, also the Princeton, Yale and Harvard model); like Kahn, Saarinen no longer goes for Modernist complete glazing, but for solid, heavy walls. Nevertheless, 'the courtyards make a convincing statement for the collegiality and interaction of groups gathering together' (Robert A. M. Stern). Saarinen apparently went to Oxford as well as to the San Gimignano in Tuscany, the English Townscapists' (see below p. 91) favourite Italian Hill Town (fig. 1.13).

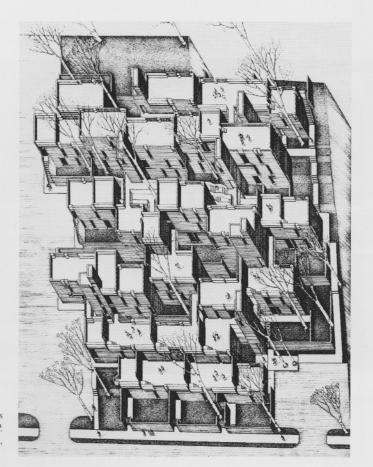
What matters most in our context is that these residence halls and colleges were architect-initiated, in the sense that their institutional characteristics were to a large extent the result of the designer's convictions of the link between architecture and individual or social behaviour. Within a total picture of the academic and social policies of higher education, however, their contribution must not be overrated. These halls or 'colleges' can be seen in the context of a tradition of experimentation in the top East Coast institutions, as well as in the tradition of purely architectural innovation and individuality. We must bear in mind some of the chief perceptions of the period, the contrast between the rich college and the mass higher education campus. However, we should note that the same experiments were taking place at least in some of the latter universities. As they were likely to lack architectural kudos they have not received the attention they deserve, at least from an architecturalinstitutional point of view. Robert M. Crane, Dean of Students of the University of Illinois, in 1963, presented the usual arguments in favour of student residences and gave a detailed analysis of various kinds of halls in a number of universities, using a certain amount of new architects' language, such as 'design for living'. Most eye-catching in its plan is the Alfred and Matilda Wilson Hall at Michigan State University by Ralph R. Calder and Associates, reminiscent of the archetypal architecturalinstitutional model of the eighteenth to nineteenth centuries, the panopticon: individuals surrounding a communal core. The relative lavishness of that core is all the more astonishing as it was built at a time when a 'housing shortage necessitated housing three students in rooms designed for two'. Crane is, however, not clear at the end as to whether the 'college' should be the norm. He talked of the return to the "collegiate" experience on the large campus', but he also says: 'These designs for living



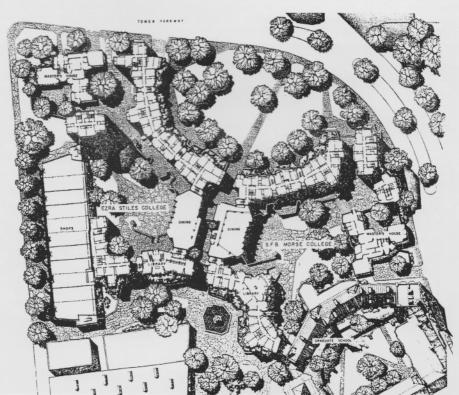
1.10 Baghdad University, engineering library and part of central plaza. (W. Gropius and others, *The Architects' Collaborative*, London, 1966)

1.11 Baghdad University, planned from 1959 by Walter Gropius/The Architects' Collaborative. In the centre: auditorium, administration building, office tower, student center, art gallery and museum; around it are grouped the academic buildings. Adjacent to the centre are the student residences and along the river faculty housing. (W. Gropius and others, *The Architects' Collaborative*, London, 1966)

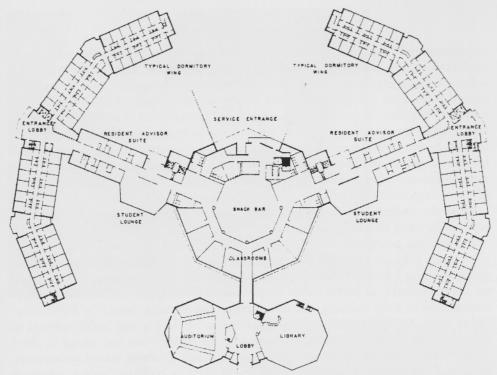




1.12 Yale University, married students housing, by Paul Rudolph 1960. (P. Rudolph, *Dessins d'Architecture*, Fribourg, 1979)



1.13 Yale University, Morse and Styles Colleges, by Eero Saarinen 1960–2. (A.B. Saarinen (ed.), *Eero Saarinen*, New Haven and London, 1968)



1.14 Alfred and Matilda Wilson Hall, Michigan State University, by R.R. Calder and Associates, c. 1960. A block for 564 women and another one for 560 men with communal facilities in the centre. (American Association of Architects Journal 9–1963, p. 81)

should not necessarily dominate a campus scene, for there are many other kinds of living experiences to be considered' (figs 1.14 and 1.15).

Searching for a fully unified institution, one may turn at this point to the community colleges. They were usually strictly limited in size, thus the major problems of multiversity diversity would not arise. A typical college comprised 3,000 students on 150 acres (61 hectares) and could cost about \$10m to build. As has already been

1.15 Alfred and Matilda Wilson Hall, Michigan State University. (American Association of Architects Journal 9-1963, p. 81)

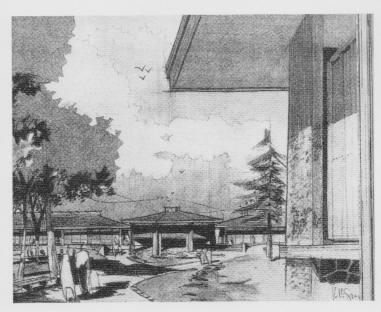


emphasised, this institution normally lacked one major ingredient of the 'college', the residential section, and for that reason it is marginal in any story of the traditional college. Comparisons with the campuses of important universities are also normally limited because of the lack of a major library or other kinds of prominent central university buildings. In most cases, economy was perceived of as an additional virtue and could further the aim of unity in concept and in appearance. The American Institute of Architects recommended a 'more active and continuous exchange of ideas between architect and client, compared 'with the traditional practice'. By the 1970s the community colleges were receiving much attention, even from the top echelons of the architectural world. 'Many . . . campuses are handsome places which generate pride in the students and faculty who use them, and in the community whose votes paid for building and operating them.'

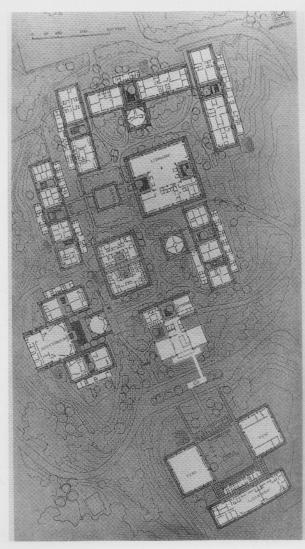
An eminent practitioner who preached the social and educational virtues of the community college and earned very high architectural recognition for his own examples was Ernest J. Kump. Rooted in California, Kump's national recognition was based on his work there, in particular on his innumerable designs of schools and his systematisation of their planning and construction. Approaching design for higher education from the 'lower end' was not degrading; as we saw, it was highly relevant in Gropius's case. As with Gropius, no comment, no analogy was too strong to drive home Kump's convictions about the socio-educational effects of school architecture: 'A school campus encompasses practically every space or building function necessary in man's social complex'. Hence he speaks of 'the total objectives in campus planning'. But his own article on the community college lacks specificity. What he chiefly means by 'total' turns out to be a broadside against 'mere technical efficiency', and a lack of care for 'total architectural objectives, including expression'. His major recipe for any good campus is to limit its size. Kump's Foothill College, Los Altos Hills, built between 1959 and 1962 for 3,500 students received widespread praise. Kump does not adhere to the prevailing assembly of long rectangles but uses chiefly a square component, or combinations of it - which he had just developed, as a 'module', for schools, but which was also not unlike Gropius's plan for Baghdad. Descriptions concentrate not so much on the buildings but on 'the impressive unity, achieved by a searching use of basic structure to create harmonious volumes of space', or 'of series of 'outdoor "rooms"'. Their intended function was carefully differentiated, from the many small, intimate patios to a large formal area for outdoor assembly. Finally, Kump strongly unified the campus through the consistent use of local redwood and the prominence of the roofscape over the mostly one-storied buildings. This 'Bay Region Style' was interpreted as suiting the local community. '... an entire community instantly felt at home . . . Above all there is genuine warmth' (figs 1.16 and 1.17).

CAMPUS: 'MODERN' AND BIG. ALBANY

American Modernist architecture was, by the early 1960s, divided into two major factions. We must briefly look at the one opposed to what has been discussed so far, that is those designers who opted for strict rectilinearity, preferably combined with large size and often with symmetry and achsiality. In higher education the two trends may be related back to the old factions of Gothic and Classical and thus to the smaller



1.16 Foothill Community College Los Altos, 'Typical informal court'. (*AFor* 11-1959, pp. 138–9)

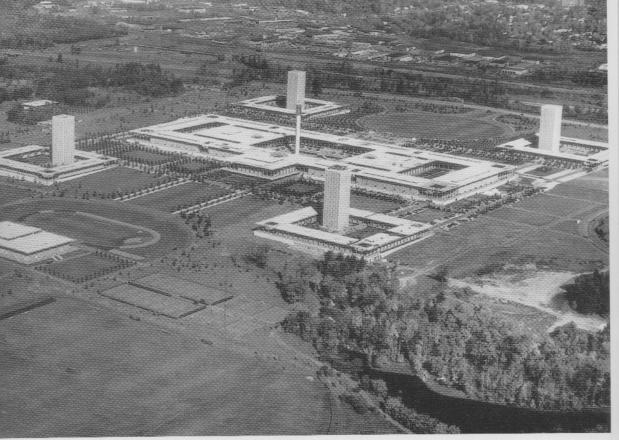


1.17 Foothill Community College Los Altos, 1959 onwards, by Ernest J. Kump. (AFor 11-1959, p. 134)

kind of college building and to the grand Beaux Arts campus, respectively. A design that shows the transition from Beaux Arts to Modernism is Church College, Hawaii, begun in 1955 by Harold Burton. This sports a geometric Classical portico in the centre of a very rigid main frontal block. Behind are two symmetrically placed residential blocks. All buildings are of the same height and are flat-roofed. By that time, Mies van der Rohe's Illinois Institute of Technology (IIT) Chicago campus, begun in 1938-9, had already been heavily publicised. In his final design Mies provides a good number of separate rectangular blocks, laid out in strict rectangular fashion with rather undefined spaces between and without any of the linking passages beloved to the Gropius school. In what may be a singular case, Mies seems to have refrained from claiming particular qualities of educational or social impact for his buildings; this, and Mies' well-known reluctance to let the individual function of a building speak and give buildings diversity, distances this campus from the American tradition perhaps more than any other university building. The USA's busiest architectural firm SOM (Skidmore Owings and Merill, in this case Walter Netsch, cf. p. 196) then applied some of Mies's severity of repetition in their United States Air Force Academy at Colorado Springs, but adapted it in a rather un-Miesian metaphor of military drill.

Altogether, this Modern-and-straight faction is far more difficult to trace and to assess than the collegiate one. Its most important university campus, Edward Durell Stone's State University of New York at Albany, was a bête-noire for critics and subsequently even for historians. It is crucial to keep Albany's assessement by the critical elite apart from the way in which the complex actually fits in with the major issues of campus design of the 1950s and 60s. We have already mentioned the large organisation which the 'Empire State' under Governor Nelson Rockefeller started from 1960. The institution itself was very young, or rather, it had only just 'graduated' to full university status from a minor college, housed mostly in ramshackle buildings inside the town. Rockefeller took the initiative and he virtually forced the Golf Club to leave the required site. Speed was of the essence, Stone was appointed in late 1961, the model presented in the summer of 1962, the first buildings opened in the autumn of 1964 and the whole was essentially completed by 1969, for 10,000 students at a cost of just over \$100m. The architect's model looked grandiose and its realisation came very close to it.

Stone was chosen as 'a Pioneer Modernist'. We noted how the New York state authorities prided themselves on being efficient both economically and architecturally. Stone, however, on occasions, stressed that he was 'free from all limitations'. He had two very clearly defined ideals: 'a great formal composition in a pastoral setting', and Venice: banish the automobile. It followed, for him, that the standard kind of American campus with its spread-out diverse buildings (as had, in fact, been proposed the year before at Albany by Rockefeller's architect friend, Wallace K. Harrison) could not have led to a grand form, but certainly to many roads. Stone united all the major teaching and social functions into one large, over 1,500 feet (500 metres) long rectangle. All vehicular service access is from underneath the podium on which the whole is built. Other users' cars are parked a long way away, mostly on the perimeter, and there is a complex network of pedestrian ways. The functions of individual buildings, such as the library and the theatre are not easily distinguishable from the outside. What is evident is rather the communication network, the covered passages outside and inside the complex which take a considerable amount of space. At this point



1.18 State University of New York at Albany, air view, by Edward Durell Stone. The 'Academic Podium' with the Water Tower, next to it, projecting, the campus centre; to the left of the Water Tower the central library, to its right the performing arts centre, the faculties take up the periphery; the smaller quadrangles are residential halls and residential towers. (University Archives, University at Albany SUNY)



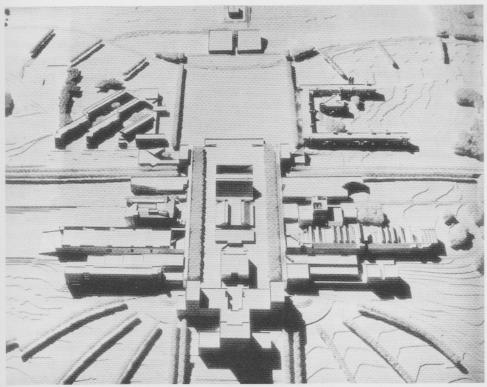
1.19 Albany State University of New York presentation of model with Albany Mayor Erastus Corning and Governor Nelson Rockefeller in 1962 (Stone was abesent). (University Archives, University at Albany SUNY)



1.20 Albany State University of New York Colonnades. (University Archives, University at Albany SUNY)

Stone harks back to the old college idea, to Harvard, and also further afield, to Islamic and Pompeian courts, intending the inner courtyards at Albany to offer the 'cloistered calm . . . of a college campus'. Where it comes to the structural detail, Stone stresses economy as well as beauty: everything is built up on a 16 inch (41 cms) module of 'white concrete' cast in situ. With that much laid down by the 'free' architect, it appears that Stone left the inside of his structures, in a rather Miesian way, relatively free, to be planned by the users. As regards expandability, it played some role in the discussions, and was to be achieved simply by erecting further square courts. The student residences Stone wanted as separate units but not dispersed, as Dober still advocated. Their court shape repeats the centre but also contains a tower block. With their twenty-three-storey verticality, reciprocal to the (three-storey) horizontality of the rest, the student residences could not have been more clearly related to the whole (figs 1.18–1.20).

The way Stone and his patron openly preferred an independent parkland campus, outside the town, continued the old campus tradition. Dober recommended a flat area: Stone began by levelling his site. But the way in which Stone combined an institutional building of an unprecedented size with a radical degree of visual unity decisively breaks away from the 1950s mode of dispersion to which Dober in 1963 was still fully adhering. In that sense, Albany may be grouped with the North American buildings of a later chapter - the 'one building campus'. Stone's strict pedestrianisation was also in step with the latest planning thinking. Above all, Stone's Albany was 'his'; it was one of the major 'architect's universities' of the period and in this particular sense it also has much in common with the highlights of our next chapters. Like all new campuses, especially 'architects' ones, Albany received some user criticism, but this was minimal compared with Chicago Circle or some of the English new universities. Stone, however, was, by then, manoevering himself into an unfashionable corner, that is, as far as the critical establishment was concerned. Two elements accounted for this: his insistence on symmetry and his repetitious detailing which was held to be 'decorative' (the 'decorated box' - Robert Stern). In the case of Albany, this led to the reproach of 'no variety, [no] choice', or 'hypocritical authoritarianism'. But there were other factors at work; Rockefeller's grandiose undertaking was considered plebeian among the East Coast academic and architectural elite. This would, of course, not be voiced directly, but it was revealed in statements such as: 'Needless to say, some of the students are thrilled. Boys and girls from upstate farms and small towns find the environment exhilaratingly urban', so Ervin Galantay, professor of architecture at Columbia University. Stone insisted on what appeared to be an older kind of aesthetic of the 'formal'; he made clear that he did not care for the critics and was happy with appreciations from non-professionals. To some critics, his buildings could thus appear as cheaply commercial: Albany seemed like a 'Cecil de Mille spectacular' (Galantay). A much smaller campus designed for the authority which New York saw as their great rival, California, namely John Carl Warnecke's College Heights, San Matteo of 1964, took its cue from Stone, with its strict repetition of the same decorative-constructional motif of the arcade, and was also criticised as 'glib' and 'vacuous'. Later, the layout of the new New York State University Campus at Purchase softened the formality and at the same time provided a maximum of individualist architectural opportunity by having single buildings designed by several members of the avant-garde (fig. 1.21).



1.21 Purchase, State University of New York College at Purchase. Layout by Edward Larrabee Barnes Associates, designed from 1967. (AFor 11-1970, p. 34)

Within the context of university design, the criticisms of Modern and big seem, once more, to demonstrate the strength of the Gropius-derived kind of Modernism. By the later 1960s the majority of designers almost everywhere had turned against the grand single form, even Mies's star was sinking. As regards higher education one is tempted to express this, again, in terms of the preference, ultimately, of the Gothic Revival college tradition, with its infinitely variable conglomerates, where each major part of the institution can be clearly identified and which, above all, appeared to cater better for the socio-psychological well-being of their inmates. The critic who complained of 'uniformity' at Albany duly referred to 'the English collegiate towns . . . the colleges . . . each with its marked identity'. Conversely, though, one might stress that it is Albany which stands out from the ubiquitous collegiate mode, as well as from the multiversity jumble.

A NEW COMPREHENSIVENESS IN CALIFORNIA

The last word in how to extend and unify the multiversity campus and to make it more intimate, had not yet been spoken. The problems of the relationship between large and small and, remembering Riesman, the difficulty of determining the 'ideal size of the community', continued to irk. 'To make the university seem smaller, even as it grows larger' was the chief axiom for the new developments in California.

True to the state's image of rapid and enlightened advancement during the 1960s, California took the lead in establishing institutions with a pronounced new character, or, in any case, with a stronger rhetoric of the new than elsewhere. In no small measure this was due to Clark Kerr, America's most powerful university president. Internationally educated, at Swarthmmore, Stanford and London (LSE), he had been chancellor of Berkeley until 1958 and then president of all the universities of the state until 1967 (when he was purged, after the student revolt, by the new governor, Ronald Reagan), as well as being chairman of one of the busiest research institutes, the Carnegie Commission on Higher Education. California's master plan for 1960-75 was without precedent. Kerr created an international platform for its launch with his lectures at Harvard in 1962, entitled The Uses of the University. He appears as both a shrewd administrator and a cautious visionary. Of Quaker background, an economist by calling, with a speciality in labour relations, Kerr had demonstrated his left wing/coop movement leanings in the years of the New Deal. His tract on the university in general takes up a venerable tradition, going back at least as far as Cardinal Newman. Fluent in the history of medieval to nineteenth-century Paris, Oxbridge, and German Universities, his historical references lend an element of dignity thoughout, culminating in statements like 'the great universities have developed in the great periods of the great political entities of history'. There is only one major detailed theme in the book, and that concerns the underpinning of the project in the State of California (somewhat reminiscent of the arguments of the New York State Fund) and the desirability, the necessity, of the Federal Grant University system - all based on the assurance that this system can 'maintain and even increase the marking of excellence', or, put at its briefest: that one can combine quantity with quality. Here, Kerr speaks for the founders of most of the new universities dealt with in this book. At one point he refers to what he considered the admirable system of state organisation and finance of higher education in Britain, the University Grants Committee but his new Californian system goes very much further in its power and directives.

The rest of his book is an elegant flourish about the multiversity. Using the oldest tricks of rhetoric, such as the dialectic of modesty, he writes, for instance of the role of the university president: 'The president of a multiversity is leader, educator, creator, initiator, wielder of power . . . But he is mostly a mediator.'Yet neither the chapter 'The Idea of a Multiversity', nor the analysis of one of the premier examples of them, the University of California at Berkeley, nor the chapter on the 'Future of the City of Intellect' give us any concrete clues as to how students were to live or to be taught, nor what the college or campus should look like; the main purpose of the book is simply to assure us of the plausibility and greatness of the undertaking. It abounds in metaphors, such as 'a multiversity is inherently a conservative institution but with radical functions', and likens a university to a 'mechanism' as well as an 'organism'.

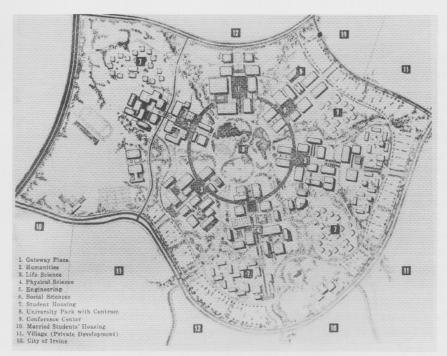
However, the facts resulting from the master plan of 1960 were soon there for all to see. A gigantic building programme was under way. California's higher education at all levels comprised, in total – including the private sector – 220,000 students in 1957, 350,000 in 1965, and by 1975 650,000 were envisaged. In 1962 alone \$100m were spent on construction, derived from loans as well as state 'appropriations'. One solution for the problem of the multiversity was the strict coordination of all institutions within the 'public system of higher education' (which in California amounted

to two thirds, a much larger proportion than in New York State), into three levels: junior or community colleges, state colleges, and universities, the latter with highly selective admission procedures ('the top 12.5 per cent'). A crucial factor was a clear statement about the size of each institution. With Charles Luckman, President of the Board of Trustees of California State Colleges, himself an architect, we meet at last somebody who addresses all the major issues in a coordinated way. The long title of his very brief outline is:

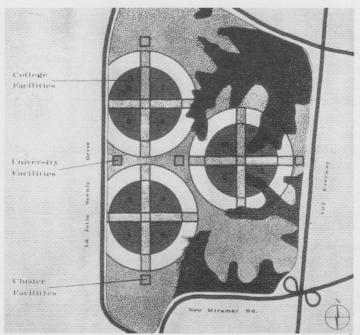
Architectural Synthesis of Educational, Financial and Physical Requirements – Guiding Consideration, Human Scale and Human Factor . . . The determination to achieve academic excellence of all our colleges . . . we must have the closest kind of coordination between three of our major trustee committees. These are Committees on Educational Policy, Finance, and Campus Planning. The reason is so simple, it is sometimes overlooked. To achieve academic excellence, we must first have the right educational curricula, both in context and faculty, then be able to finance [them] . . . our campus planning must result in a physical environment that is conducive to the achievement of academic excellence. All educators [are against] memorising and [for] learning to think. This places a high priority on the importance of the surroundings for the teachers . . . and for the students.

In turn, this should lead to a "humanation" of architecture – the proper consideration of space, light and air; the development of semi-enclosed patio areas, benches, landscaping; and, now and then, even the use of a bit of water. In short, the human scale and the human factor is a guiding consideration.

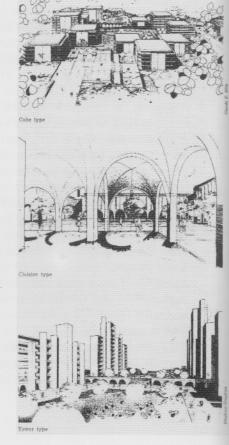
Behind this newly foregrounded social-architectural ethos was another eminence, William Wilson Wurster, Dean of Environmental Design at Berkeley, who, with Kerr as chancellor, had devised the 1955 Long Range Development Plan for the Berkeley Campus. Wurster was a Californian with a belief in the rightness of the local 'Bay Region Style', a Californian vernacular (cf. figs 1.16 and 1.17), and a consequent scepticism for International Modern. However, Wurster had also imbued much of the Gropius kind of Modernism when at Harvard and MIT during the 1940s and was married to the refugee European housing reformer Catherine Bauer-Wurster. Wurster's own buildings are little known outside the USA, and his pursuit of an architectural career can be seen as the opposite of somebody like Stone's. He, and Kerr were also helped by among others, R. Nevitt Sandford of American College fame. In addition they followed the model of Harvard Houses and the Oxbridge ideal generally. Berkeley first of all tried to put planning and design into a close relationship and insisted that, on the one hand, only 25 per cent of the land should be covered with buildings, but, on the other hand, that buildings should be 'pulled together into close groups, reflecting functional relationships . . . on tight clusters'. Wurster, as early as 1959, was sceptical about Modernist 'commercial' slab blocks. As regards residences, they should both be fitted with recreational spaces (Kerr: 'youth is vehement and boils over if easy outlets are omitted'), but also placed as closely as possible to the teaching blocks. 'Kerr . . . worked hard to make the campus the center of student interest'. The allegiance to the State of California and the Californian environment meant, finally, that Wurster preferred Californian architects for their programme, and Californian forms, on the model of Kump's Foothill Community College already shown.



1.22 University of California at Irvine, by William L. Pereira and Associates, layout 1964. (ARec 11-1964, p. 187)



1.23 University of California at San Diego, Robert E. Alexander and Associates, schematic layout 1964. (ARec 11-1964, p. 193)



1.24 University of California at San Diego, proposed college types, 1964. (ARec 11–1964, p. 197)

It was for the three new university campuses that Kerr reserved the term 'experiment' – at Irvine, San Diego and Santa Cruz. A major innovatory teaching element was introduced at each: at Irvine the way each student could choose his or her own programme; at San Diego the attempts to bridge C. P. Snow's 'two worlds' (cf. below page 101) of science and humanities, and at Santa Cruz the pass/fail system. Kerr was adamant that all of them should grow to multiversity size, that is to about 27,000 students, the figure, in fact, which their 'mother' university, Berkeley, had reached by then. This size was needed, Kerr argued, to provide excellence as regards libraries, laboratories and cultural facilities. These expectations, however, had to be very much scaled down in the 1970s.

We come finally to Kerr's solution of the problem of the multiversity:

The big campus lacks the inestimable virtue which the small liberal arts college counted as its hallmarks: the emphasis on the individual which small classes, a residential environment and a strong sense of relationship to others and the campus can and do give. Each of the university's new campuses is an experiment in combining the advantages of the large and the small. Each will offer a different answer to the problems of preserving a sense of individual worth in a world of increasing numbers and of maintaining quality in the face of such numbers.

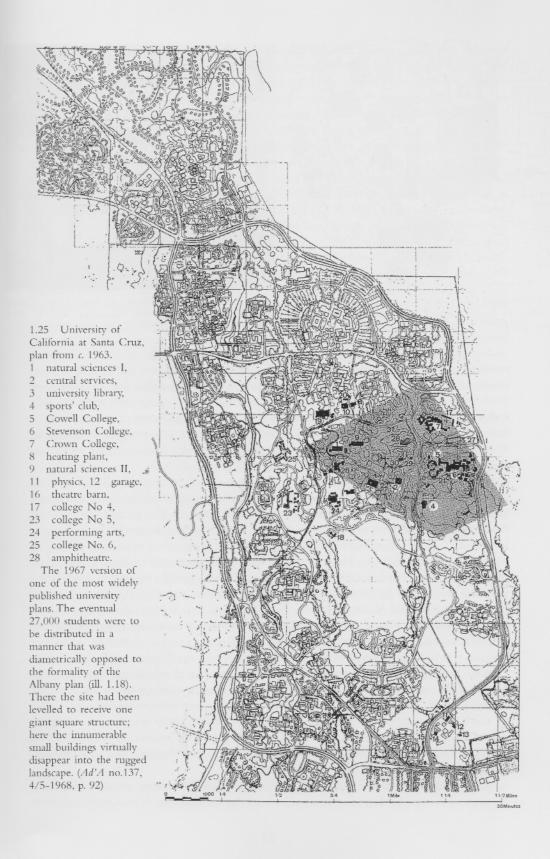
Irvine was apparently sketched out by Kerr himself and then worked out by William L. Pereira. It opened in 1965. Its outline plans are reminiscent of earlier concepts of ideal towns, notably Ebenzer Howard's Garden City. The centre is formed by a park, with a slender 300 feet (92 metres) 'Centrum' tower. This is surrounded by a 'circle' on which border the complete array of faculties, plus a 'core', containing the central library etc. which also serves as the 'Gateway plaza'. The faculties reach outwards from the circle, like the 'spokes of a wheel' and in between the spokes Pereira planned subsidiary functions, like schools, and houses, in order to help draw in the outside community. All this is placed within a 10 minutes walking distance. The calculation of the walking distance and the claim of its brevity was now becoming a must in all campus planning. Residences are placed a little further outwards and it is stressed that they are 'not directly connected' with academic activities (fig. 1.22). San Diego was envisaged by the architect Robert E. Alexander as a high density complex of three clusters of four colleges (somewhat in the manner of Claremont, see above page 23) with 2,300 students each (and thus, in all, to make the total of 27,000 students, there were to be twelve colleges); each college cluster, in turn, contains major academic facilities. The college, as such, is divided into residential blocks, containing fifty to seventy students, ten on one floor, sharing bathrooms etc. There is in addition, a major centre for all, a 'true center of the communicating arts', and some of the more specialised teaching facilities are accommodated in separate units. In other ways, the residences differ considerably from each other: the 'cube', i.e. Modernist; the "cloister type", suggested by Christchurch Oxford' and the "tower" type, that is, high rise blocks ('San Gimignano'). Each college was to 'have its own distinct character architecturally', evoking stylistic considerations from the earlier part of the century. Little of this was built, however, and the whole plan was drastically revised in 1966, scaled down and the density much reduced (figs 1.23 and 1.24).

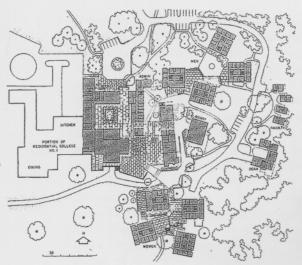
Undoubtedly the most complex model of the concept 'small within large' was the

University of Santa Cruz. More literally, this campus now consists of just of a number of colleges and is seen by many Americans as being akin to the 'traditional' English college rather than the American university. Serious planning had begun in 1961, the Long Range Development Plan was issued in 1963 and the first students were admitted in 1965. About nine tenths of the cost, \$9m by 1968, was state provided or state-loaned. The founding chancellor was Dean E. McHenry, a political scientist from UCLA and in terms of socio-political outlook a fellow traveller of Kerr's. Thirty-four colleges were planned. This was revised to twenty and by 1978 only eight had been built. There are, at Santa Cruz, some central facilities, a library, a theatre, some buildings for the natural sciences, a sports pavilion ('Field House'), service buildings and some lesser structures, some of which are grouped together approximately in the campus centre but they are far less marked out than usual. Social buildings, in the main, form part of the colleges themselves. What is, first of all, extraordinary at Santa Cruz is not its buildings, but the terrain itself: a heavily wooded, mountainous, even rocky site of 2,000 acres, that is 800 hectares, about 5 kilometres long and 2 kilometres wide (3 by 1.5 miles). This terrain itself does not allow for any kind of centralisation of views, let alone axial arrangements. The master plan was provided by John Carl Warnecke, California's best-known pracitioner and designer of several state colleges. The landscape architect was Thomas D. Church, from Berkeley and some buildings were by Kump, whose calculated informality we have already met at his Foothill Community College (fig. 1.25).

Each college is designed to cater for about 600 students, 50 per cent of which were residential, a very high proportion for a large university anywhere. The college comes under the leadership of a provost under whom the faculty develops a collegiate curriculum plan, providing a different focus for each college. University-wide, each field of study came also under a board of studies. Students usually received all the first and second year teaching in their college, but only some in their third year. Santa Cruz's aims were restated many times: there was to be a 'climate of curricular innovation', a 'distinctive collegiate environment', 'renewed emphasis on teaching', 'work towards an enriched student-faculty interaction'. A great diversity of teachers were attracted, including some from Oxbridge. There was indeed a perception that Santa Cruz was 'explicitly derived from the medieval colleges of Britain', a perception which, however, betrayed a degree of ignorance of the new situation in England. Closer parallels to Santa Cruz are, in fact, the contemporary 'collegiate universities', such as Kent or York.

It is seldom possible on the campus to see more than one group of buildings. Colleges are usually at a distance of 300–600 metres (1,000–2,000 feet), though some are twinned for economic reasons. The colleges themselves follow neither the traditional European/American courtyard principle, nor do they adhere much to the Gropius kind of flat-roofed parallel ranges, nor again to the spidery kind of plan of York, but consist of a scatter of two– to three-storey blocks which are placed in rather close proximity, next to a complex of communal facilities, with additional small blocks containing teachers' dwellings on the periphery. The first, Cowell College, of 1966, by Wurster, presents large, low-roofed communal facilities and a series of three-storey residential blocks, loosely grouped around green courts. Next door, Stevenson College of 1966, by John Esherick, is denser. With their lively roofscapes all the buildings are bound closer together and the spaces in between take on more the character of a





1.26 University of California at Santa Cruz, plan of Stevenson College, by Joseph Esherick and Associates 1966. (*ARec* 11-1964, p. 184)



1.27 University of California at Santa Cruz, Crown College by Ernest J. Kump Associates 1967/8. (M.F. Schmertz, Campus Planning and Design, New York, 1972)

small town (fig. 1.26). Crown College 1967 by Kump is denser still but its smaller shapes suggest rather a village kind of atmosphere (fig. 1.27), while Merill College of 1968/9 by Campbell and Wong appears more dramatically integrated with the hills and treescapes. The characterisations 'small town' and 'village' have, of course, little to do with traditional American conceptions; some parallels can perhaps be found in Townscape-influenced housing in some English New Towns from the later 1950s (on the Berkeley English links cf. page 202 below).

While the early overall plan of Santa Cruz was shown in virtually all architectural journal articles and books throughout the world, the actual buildings of the university and its colleges figured more rarely in architectural eulogies. The great exception was Kresge College. Here we reach a peak of American university design of those decades; in its pedagogy and in its architecture, Kresge was the most noted institution of all. The name was derived from its benefactor who otherwise remained unknown. Founding provost was the microbiologist Robert Edgar who was greatly assisted as regards the teaching philosophy by the East Coast-trained reformist and Carl Rogers-influenced psychologist, Michael Kahn. Much of the 'húmanistic psychology' sounds like that of the experimental colleges of the previous thirty years: 'a living-learning community which concerns itself with human as well as intellectual needs . . .'. But Freudian and Jungian psychology was now taken further in the very small formal-informal groups ('family' or 'kin groups'), engaging in new 'encounter and sensitivity training techniques'. Thus, in a way, Kresge adopts elements from the psychology of the student personnel services, yet it does not use them in the same plain instrumentalist way - after all, there were no grades at Santa Cruz, only pass and fail. There was, finally, a straightforward hedonistic element, a new spontaneity in order to 'encourage students to let go, to explore, to enjoy.' The central ethos was perhaps best expressed by stressing 'participation rather than efficiency' (David Riesman).

It is a common perception that the extraordinarily intense social-educational concept of Kresge College found its match in the architecture. It was provided, from

1970, by Charles W. Moore, a somewhat anti-establishment-minded designer, at home both on the East and the West Coasts, who believed in complexity, strong colour and a Post-Modern relaxed attitude towards architectural theory and history. Kresge's basic type adheres to the common - and economic - formula of the rectangular two- to three-storey blocks, in this case containing mostly eight four-bed-apartments as well as accommodation in 'dormitory form'. There are a number of faculty residences, the provost's house and diverse communal buildings, the latter, however, appear much less separate than, say, in the first college, Cowell. Furthermore, the architect tries to go beyond the scatter method of arranging all these buildings; by lining them along both sides of a consolidated public street, 1,000 feet, or 300 metres long. Of course, it is a pedestrian precinct, yet not in the common, formal manner, but in the old 'village' way. It is the kind of space that one finds in newer models of dense 'Mediterranean' holiday villages, ultimately going back beyond English Townscape to a Sittean and Unwinian understanding of the traditional English, German, or Italian small town. Moore's own special style of design is the constant screening off and opening of spaces. However, it is not enough to talk - as with the other colleges at Santa Cruz - about the 'blocks' themselves but there are innumerable features, such as covered porches, balconies, external staircases, gateways, pergolas etc. which define and redefine the public-private borderline. Many of these features are given closely defined public functions, or rather, each 'public' function is made a special formal feature of, say, the post office, the laundry, the garbage compartment, the rostrum, the 'amphitheatre' etc. - in an almost playful way, heightened by the intense colours, and always strongly contrasted with white (figs 1.28-1.30).

In what particular ways did this architecture fit in with the college philosophy? Within the college there is one block with a special experimental arrangement, experimental in an educational-psychological, as well as architectural sense. It contains the 'Octet Units', each 'octet' presenting an open living space, rising through three storeys; here the inhabitants are left to their own ways of arranging living, study and utility spaces. Another feature helping to create the desired sense of communal openness is the way in which many rooms or apartments look on, and feel very close to the village street - by comparison the other college plans resulted in a much greater degree of separateness. Kresge is probably the peak of the development of both the traditionalist and the Modernist devising of spaces, private, semi-private and public. Above all, according to Klotz, there is a complete lack of hierarchy and an avoidance of a sense of monumentality - still present in most of the other designs of the University of California. Indeed, Kresge adopted a mode tried in some of the English new universities, Lancaster in particular, where there is virtually no differentiation according to institutions, meaning that it is hard to pick out the library or administrative building from the residences. The process of merging into a whole is complete. For Moore, finally, it was the 'joyous academic celebration' as well as a certain 'insouciance' which mattered most.

AN INTEGRAL APPROACH?

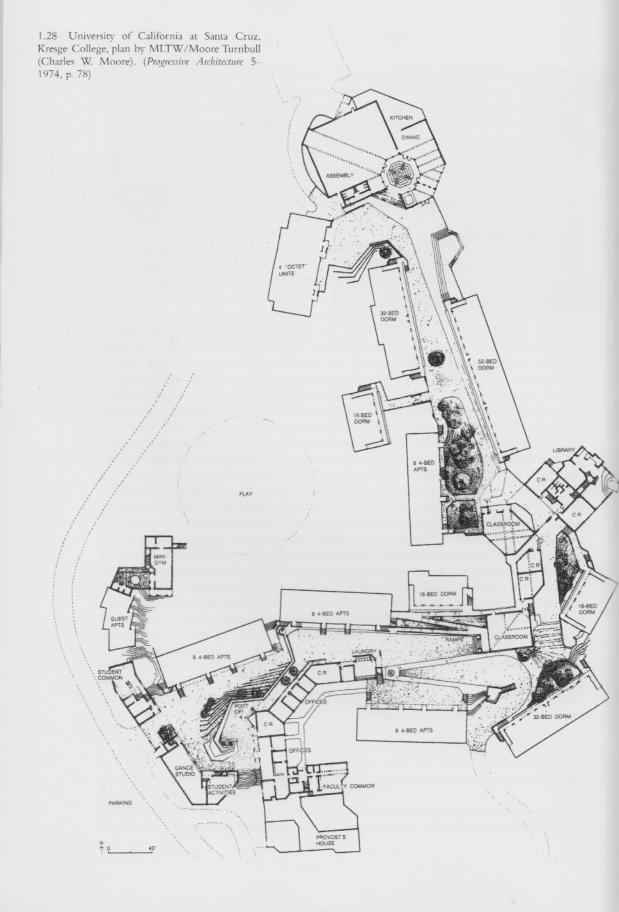
If utopianism means anything, then it must entail acting in unison when creating an institution. One can easily cite elements which were shared without reservations:



1.29 University of California at Santa Cruz, Kresge College 1970-4. (Courtesy Don Kenny UCSC)

1.30 University of California at Santa Cruz, Kresge College. Fountain Court of the Assembly Building. (Progressive Architecture 5-1974, p. 83)







1.29 University of California at Santa Cruz, Kresge College 1970-4. (Courtesy Don Kenny UCSC)

1.30 University of California at Santa Cruz, Kresge College. Fountain Court of the Assembly Building. (Progressive Architecture 5-1974, p. 83)



terms like 'community'; the way a small college was believed to provide a highly desirable kind of atmosphere, or the way in which a large campus had to be laid out efficiently in order to assure its optimal functioning. These elements had, however, been around for several generations and they were part of the generalised American utopia of education with which we started.

The fact now was that the sub-discourses which had developed from the 1930s and 1940s lacked coherence and inter communication. The general rhetoric, used by university administrators and those involved in the founding and financing of institutions remained a strong ornament. But, by definition, this rhetoric could not deal with any detailed professional concerns. We then examined the discourses of those who felt in charge of the whole of the student's extracurricular affairs, the student personnel services, which were of interest here because they presupposed a certain kind of unity of the institution. They grew enormously during the 1950s and 60s and began to replace another, older kind of university discourse, the educational-moral one. Ostensibly the strongest discourse to concern itself with the whole was 'planning'. However, it too, became a seemingly separate operation, it hardly touched on architecture, while Modernist architects usually took planning for granted and did not see why it should be made a separate issue. The conglomerate of all these factors, meaning at the same time, the non-collaboration of all these discourses, was, in fact, the 'multiversity'. As Kerr remarked: 'the idea of a multiversity has no bard to sing its praises, no prophet to proclaim its vision'. It was the issue of the reform of the multiversity which this chapter set out to investigate. Was it reformed? If so, how much did architects have to do with that reform?

The architects' discourse, too, appeared a relatively closed one. We have already stressed that the architectural historians' set of buildings was largely chosen, initially, by the 'architectural world' itself, that is, by the specialist architectural periodicals although some attempt has been made in this chapter to broaden the spectrum. On the whole, the interest in university architecture has been limited to the extent it figures within the work of those who are, or were, considered masters. Seemingly inevitable was the selection of relatively expensive buildings (though there were very notable exceptions in that respect, for instance Gropius' Harvard Graduate Center) amongst the most prestigious institutions. In any case, these masterworks on campus were mostly relatively small individual buildings or complexes. In the critical analyses of some of the famed buildings, especially those by Louis Kahn, sometimes a gap opened between the severe criticism of their practical usefulness and the praise of their formal qualities, which further pushed these buildings into their own sphere of architects' architecture. While it was usually not difficult to find some professional voice to confirm an overall educational intention, American designers, although often quoted at length in the most general terms for their artistic and socio-political outlook, appear uninterested in the detailed, committed analysis of the plans and buildings for universities, quite in contrast to many of their English and European confreres. Turner's book, again, appears as a concluding example of this state of affairs; while sounding, at the end, reassuring about the links between architecture and institution, it does not go much into detail about the actual links, at least in the period in question. We shall see that there is a fundamental contrast between the USA and England, certainly in the 1960s, in that English socio-academic innovation seemed to go together neatly with architectural innovation, propagated by a much more united

architectural and planning profession and their spokespersons. In a very limited way the obscure – in terms of high architecture – periodical *College and University Business* made a courageous attempt in 1970 to cover the whole architectural effort of the country by asking 2,309 chief financial officers and 1,423 architects to nominate their latest best designs. In its selection the journal most carefully mixed practical financial detail with up-to-date architectural jargon, and selected known as well as unknown institutions.

The neglect was mutual. It may be understandable in the case of the student personnel services which did not want to stray from their professional position in the conception of a good university. But even a broad-minded, yet critical analyst/chronicler, moreover one who probably had studied more campuses in greater detail than anybody else, David Riesman, manages to present a close analysis of life and teaching at Kresge College without any detailed or principled reference to the architect and his design, save for a brief mention of the 'Octets' – and this for a group of buildings where intense pedagogic and intense architectural aspirations were supposedly closely combined. A little later Riesman puts in some praise of the architecture of Santa Cruz, and yet, also refers to 'the still poorly understood relations between architecture and learning, inevitably plagued by changing user's values and tastes'.

It is probable that the lack of mutual understanding can be explained through the narrow instrumentality which each of the professions were locked into, and which, in turn, may be explained through the way most of the discourses developed so rapidly in academic terms. As it was said about the planning and building professions in 1970: 'Essentially the major groups work alone, in the sense that experience and "know how" tend to separate them functionally. A total effort of coordination is not considered essential.' But there is a deeper issue here. At the beginning of this chapter it was stated that the vast scale of academic ranking did not constitute a problem for our investigation. Indeed, the quantitative expansion was each profession's first aim. But to raise quality, to insist on a high position within the system, was, of course, equally important. The fact was that new hierarchies had arisen within the various branches of overall reform. It appears strongest in the field of psychology. There is the 'lowest' strata of those who deal with the practical day-to day psychological or sociological advice. There is the next strata - a nationwide academic network of those who empirically research into college psychology or sociology. There is, or at least was during the 1960s and 70s, a higher strata of sociological research into reforms within the old academic top range (e.g. Riesman's work), where the discourses of the first two levels are rarely mentioned.

It must not be omitted to say, of course, that all these discourses, in themselves, constitute a remarkable achievement. But in our context of the utopianist university, the lack of mutuality, of unity, brings us back to the multiversity once more, to confirm, once again, that the multiversity could, by definition, not be a utopianist university. For our account, we 'found' a small number of clearly utopianist universities in the USA; how many there really were, is impossible to say here. In spite of the Anglo-American similarities, age-old and new, it must be noted that we will face a rather different situation in England, as well as in Germany, as regards utopianism and its discourses: particularly in Germany where all those involved made sure that their contributions were well heard. There were, in fact very few New Universities in the USA, in the sense of a fully comprehensive institution of high academic rank. Certainly one

cannot speak of a homogeneous group of new universities; which, ultimately relates to the fact that institutions in that country are traditionally more individualised. They simply could not all be expected to follow a single new direction.

Lastly, there is a problem here of chronology, of the rapid change of theories and fashions in architecture and planning itself. Riesman's remark about the fickleness of the users was not at all out of place during the later 1970s. By that time, a different climate applied to critical architectural opinion, as regards the power and predictability of design, which differed fundamentally from the beliefs held up to the early or mid-1960s. Surprisingly early, in 1966, the leader of Santa Cruz, Dean McHenry, pronounced – perhaps he wanted to sound informal at a conference – the following low-key analysis: The fact is that physical planning cannot ensure educational soundness – it can only help it along. The fact is that small numbers cannot guarantee educational soundness – they can only make it more easily attainable. Put quite simply, we believe that the thing that will make the college work – given the assistance of a sympathetic physical and educational plan – is the fact that it will be to the peoples' advantage to make it work'. So much for all the efforts to bypass instrumentalisation and to assert the institution's primary educational-social effect on the individual!

In the end, however, one may take a simpler view. Instrumentalisation or not, who would put into question the academic superiority of American universities post World War II? Can anybody really provide clear proof that the multiversity has been detrimental to the educational effort, however defined? If everybody insists on keeping to the utopia of the small college, the utopia of higher education for all can never be achieved. In contrast to what was considered the shapeless German Massenuniversität, the American multi-university might still be considered at least a conglomerate of institutions. In terms of architectural patronage, it may be noted that all the important new campuses discussed here - and we may also include Chicago Circle, to be dealt with in Chapter III - are state universities and together they do present some counterpoint to the private university architectural establishment. As regards utopia, more narrowly speaking, there was an increasing faction who maintained that where there is no utopia, there will not be dystopia. Some of the much-vaunted integrated campuses of the New English University movement, brought, arguably, just that. However, this means jumping too far ahead. The next two chapters present the utopianist university argument in full, in England and in North America, and will include new battlecries for both college and campus, as well as a newly defined 'urban' ideal, After that we shall see how new ideas of student life began openly to denigrate the older and newer kinds of liberal institutionality and helped to 'bring down' both college and campus.