

implemented by Fouchet, in 1968 a complete restructuring of the university had to be quickly devised under the pressure of events.

In retrospect the Loi d'Orientation so skillfully woven by Edgar Faure has been recognized as primarily a solution to a political crisis (Bourricaud 1977; Vedel 1978). Above all it was necessary to assure the rentrée by pacifying discontented elements in the University without also antagonizing still powerful vested interests. To accomplish this Faure and his associates borrowed heavily, but selectively, from the critique of the university offered by the reform coalition and their proposals for its renovation. Under the banner of "pluri-disciplinarity" the faculties and, it was hoped, the intellectual rigidities of the old regime were swept away, to be replaced by department-like Unités d'enseignement et de recherche (UERs). Under the long-sought principle of "autonomy" these UERs were variously assembled into self-governing universities with elected presidents. "Participation," an arrangement favored in some form by the reform coalition, students, assistants and President de Gaulle, would abolish the autocracy of superannuated professors and assure that the new institutions would be responsive and adaptable to evolving social needs.

Not the least of the accomplishments of the Loi d'Orientation was to preserve at least some of the sense of idealism of 1968 through the disorganized period of implementation (1969-71). A team of OECD examiners captured the expectations of the reform when they envisioned a system of autonomous, distinctive and competitive universities, each offering students, faculty and the local economy their special expertise in the areas they had chosen to emphasize (OECD 1971b, 81-85). In other words, the ultimate goal of the new organization was functional diversification which would leave each university with its distinctive research specialties and appropriate related curricula.

In theory this would reconcile the imperatives of research with the needs of mass higher education. In fact, once the new organizational charts were established almost nothing was done to remove the practical barriers blocking entrance to this promised land. The consequent result was instead a random diversification in which the new universities, constructed from different fragments of the old faculties, superficially bore small resemblance to one another. Internally, however, the curriculum was little changed. The Loi d'Orientation, then, did not resolve the crisis of mass higher education, although, like the Fouchet reforms, it undoubtedly made some of the problems more tractable. Thus, it was only after the reorganization had taken place (1971) that the real challenge of adaptation could be faced. Basically this involved establishing programs more likely to lead to productive employment and, secondly, gaining more control over the student flow.

Given the freedom and the mandate to teach new subjects the universities tended to respond with courses centering on Marxism, psychoanalysis or ecology--interesting, perhaps, and certainly fashionable, but just as academic as the offerings of the former faculties. Progress in creating vocationally oriented programs was much more grudging. By 1976 some 200 new second-cycle degree programs of this type had been established, but they enrolled only about 10,000 of the quarter million university students at this level (Le Monde de l'éducation Oct. 1976). Perhaps the most successful innovations of this type were the Maîtrises de sciences et techniques (MST), most but not all of which pertained to scientific subjects, and similar maîtrises in fields of administration. Such programs fulfill the hopes of the 1968 reform perfectly (Casadevall 1976). Nevertheless, there is an inherent difficulty in identifying material that will impart valuable occupational skills to a significant number of students and which is not already being taught (see below, p. 38). The government, for its part, became impatient with the slow pace of this

development and resolved to force the issue. After some two years of unproductive negotiations the Secretary of State for Universities promulgated the second-cycle reform early in 1976. Its aim was to professionalize (i.e. vocationalize) all licence and maîtrise programs, making them at once sufficient for vocational preparation at their particular level and hence potentially terminal. The universities were to devise these programs themselves with the assistance of technical study groups, while final authorization of the programs would be given by the Secretary. The response was a university protest even more massive than 1968, but with practically no resonance in the rest of French society. After months of confrontation in the Spring of 1976 the government had to be content with only a symbolic victory: the second-cycle reform remained on the books, but its effect was mollified considerably by the government concession that no existing programs would be terminated due to the reform (Geiger, 1977a; 1977b).

The second-cycle reform also raised the vexing issue of imposing greater control over the flow of students. Since the 1960s there has been considerable support in government circles and among conservative academics for instituting some form of selection. The arrangements originally made for the IUTs, where students are admitted upon an evaluation of their dossiers, probably represents the type of selection favored in these circles. The opposition of the Left, in the name of those least represented in higher education, plus the misgivings of the bourgeoisie, who have benefited most from the privileges of the baccalauréat, have made overt forms of selection a political impossibility. The one exception has been the establishment of a severely selective examination after the first year of medical studies (1971) -- a measure virtually dictated by financial and pedagogical considerations. The strategy underlying the second-cycle reform was to "hold the front" at the licence by

giving the universities some measure of control over admissions to their professionalized maîtrise programs. But, by raising the spectre of selection this attempt only helped to galvanize opposition to the reform. The bulk of the university is thus left with the form of selection it has always relied upon -- attrition and elimination. And these are powerful indeed. Globally, roughly one-fourth of new students abandon their studies during the first year; of those that remain perhaps one-half will attain a second-cycle degree. Stated another way, the 61,231 university degrees awarded in 1976 (second-cycle plus medical) represented only 7.2% of the 22 year-olds in France, or 38% of those entering the university in 1972. In the light of these figures it would seem difficult to argue that the output of the universities should be restricted further. Rather, they indicate that the real problem is one of diversification and orientation.

Indeed, this is the root problem of the French path to mass higher education, one that university reformers have been struggling with for the last decade and a half. During most of this period these efforts have been widely derided as insufficient, or indicted as part of a conspiracy to maintain existing class relations. Currently the profound demoralization pervading the university is laid to the failure of this endeavor. Yet, without dismissing the serious difficulties still impeding the adaptation of the French university to the conditions of mass higher education, it is still possible to identify the progress that has been made (cf. Fomerand 1977). New material has been introduced into the university curriculum and much traditional material has been adapted to possible practical applications. Under the former faculties such developments were both difficult and infrequent. There now exists great flexibility in the intensity with which a subject may be studied: two, three, four, five and six years of work are possible in most subjects,

with an official diploma or national degree awarded upon completion of each level. The ultimate effect of such variety is not yet entirely evident, but it is still possible to hope that an open market situation will evolve within the university as the value of certain tracks is recognized in the labor markets and by students. Also, pedagogical changes, particularly the establishment of "contrôle continue," now seem to give students a fairer chance of earning a degree.

The undeniable progress that has been achieved would still appear to most observers to fall short of a successful adaptation to the conditions of mass higher education. The dissatisfaction and resistance to change is inherent to the task that France has been forced to assume. It stems from the continuity of traditional assumptions about the importance of research, the nature of teaching, the role of professors and the preference for pure science. Many of these expectations were encouraged by the Loi d'Orientation due to the anterior work of the reform coalition. The French universities still retain a number of elite functions, yet, the evolution of the reformed universities has been above all constrained by the necessity of educating upwards of a fifth of the young people of France. That evolution is far from complete. In the near future it seems likely that this same constraint will push the multitude of universities and UERs to differentiate themselves further from their common ancestor, the Napoleonic University.

### III. Politics and Structure: Belgium

The basic contours of enrollment growth in Belgian higher education are similar to those in France. The onset of rapid growth occurred in the early 1960s when the small birth cohorts of the war years were still part of the university-age population. The maturation of larger cohorts later in the decade then helped to keep the annual growth rate of total enrollments at about 10% from 1962 to 1968. Enrollment growth in France during these years was somewhat more frantic, but growth in Belgium for the following seven years was more sustained. From 1961-62 to 1975-76 both systems seem to show nearly identical degrees of growth. To account for the dynamics of enrollments in Belgium, however, it is necessary to follow the fluctuations of student numbers in normal schools, technical schools and university level institutions.

Primary school teacher education in Belgium has until recently been offered within secondary education, and consequently is not included in the Statistical Appendix (see note b). Nevertheless, it constituted an important part of the educational demand during the early stages of expansion. In 1963-64 the normal schools were training more teachers than there were students in the universities (36,800 of which 25,300 were primary/nursery level and 11,500 were middle school: Van de Vijvere 1977). From this point the normal schools declined while the universities consistently counted 5000 additional students per year through 1971. After this, however, the number of new entrants to the universities became constant, and the universities consequently registered only slight overall growth. Non-university technical education averaged some 3000 additional students per year from 1962 through to 1975, but this average conceals some significant irregularities. From 1965 to 1968, while normal school enrollments were dropping sharply (from

33,000 (to 26,000) the technical schools gained nearly 15,000 students -- as many as the universities: But for the next three years, as the universities continued their steady expansion, technical education added only 4000 new enrollments. However, when the universities ceased to grow after 1971, the non-university schools resumed slightly more than their average magnitude of growth.

This pattern would seem to suggest that enrollment levels in each sector are loosely interdependent. The decline of the normal schools apparently bouyed enrollments in both the university and the technical sectors. (The universities probably benefited from a change in the law [1964] making all general secondary school graduates eligible for university study provided they passed a relatively mild "maturity" examination.) And, the stagnation of university entrants seemed to correspond with an enhanced attractiveness of the technical schools. This conclusion is somewhat surprising considering the large disparity between the level of work and the stature of degrees in the university and non-university sectors.

Technical higher education in Belgium has always been locally based and highly diverse; thus, often eluding simple generalizations (Geiger 1978). Basically it has been offered on two levels: a short course of two years leading to the title of gradu , and a three year program leading to the degree of "engineer-technician." Some of the schools are quite venerable for institutions of this type, like the Ecole Sup rieure de Textiles at Verviers founded in 1894; but many are simply the prolongation of programs within the technical secondary schools. Expansion has proved relatively painless in this sector: the number of schools grew by two thirds in only a decade (1958-68) in response to demand. The strength of these schools has been their community base and their close ties with local industry. The consequence

of this organic development has been a good deal of disorder within the sector. Government attempts to rationalize technical higher education floundered until 1977, when under pressure from the E.E.C. a law was passed upgrading the engineer-technician to a four-year program conferring the degree of "industrial engineer."

Belgium was thus compelled to upgrade its vocational higher education, while France was widely accused at the time of the second-cycle reform of devaluing its university programs in the name of vocationalism. The reasons for this discrepancy are not hard to find. Whereas France introduced IUTs, when its expansion was already in full swing, Belgium entered the 1960s with an established and well articulated system of short-cycle vocational higher education. The IUTs, although by no means total failures, were unable to relieve the enrollment pressure on the French universities; but in Belgium the burden of mass higher education was in large measure carried by the non-university sectors, and since the early sixties particularly by the technical schools. This latter conclusion is more evident from figures on new entrants than on total enrollments. During the 1960s the universities, because of their longer programs, contained around 58% of post-secondary enrollments, while some 62% of the new entrants were choosing the non-university sectors. In the present decade the relative weight of non-university enrollments seems to have increased: about 55% of total enrollments in the universities vs. 65% of new entrants in non-university institutions. The consequences of this pattern of development have been most significant for Belgian universities which have not had to make accommodations for the "masses." Presently they seem to be educating under 14% of the age group. Thus, the universities have been able to largely retain their traditional character. This outcome was not solely due to the existence of a robust



non-university sector, however; it also owed a great deal to the politics of university expansion.

Belgium entered the 1960s with four primary universities, plus a handful of lesser university-level institutions. The Flemish University of Ghent and the French University of Liège were both under the authority of the national government. The Catholic University of Louvain and the Free (as in free-thinking) University of Brussels were independent institutions offering instruction in both languages (Geiger 1978; Verhoeven 1979). The universities were thus divided according to the major cleavages of Belgian culture. Given the consociational nature of Belgian political life (Verhoeven 1979), benefits extended to one community generally have to be balanced with concessions to their counterparts--a process often involving laborious negotiations and not a little rancor. The compartmentalized structure of Belgian universities has linked them inextricably to these political processes.

During the first phase of university expansion in Belgium, as in France, it was simply a question of providing more places for university study. Competition between universities, however, made both a new university map and an altered formula for university finance contentious issues. Enlargement of the existing universities, the establishment of satellite campuses and new institutions for population centers lacking a university (namely Antwerp) were the alternatives advocated by different factions during the early 1960s. The Janne Law of 1965 offered something to everyone, but was particularly advantageous to the independent universities. Their government subsidization was substantially increased to cover their expansion, and they received permission to open satellite campuses as well. Antwerp was granted its own state university center, but the same privilege also had to be granted to the Walloon

city of Mons. Ghent and Liège by way of consolation were promised large budgetary increases for their own development (Geiger 1978; Verhoeven 1979).

The Janne Law was intended as a temporary measure fulfilling the nation's immediate needs until permanent arrangements for expanding and funding the university system could commence in 1969. Had this course actually been open to the Belgians consideration would probably have been given to adapting the universities to a larger clientele and a larger role. Instead, Belgium like France was overwhelmed by crisis in 1968, and the future structure of the university system was determined by the imperative of finding a resolution.

Throughout the 1960s the anomalous existence of a French community of students, teachers and other university personnel in the Flemish city of Leuven had been the source of overt and bitter conflict. When early in 1968 the French section of the university unilaterally announced expansion plans, the Flemings responded to this provocation by closing the university with a strike. This issue polarized the country to such an extent that the government fell on February 7, and new elections were required before a successor could be formed in the middle of June. The unequivocal basis of the new government was the expulsion of the French university from Leuven. The creation of what is now called "Louvain-la-neuve" could not be carried out in isolation from other university planning. Eventually it involved drawing another university map and reaching a new financial settlement.

Partly in response to the events in Leuven and partly in response to a student revolt, the Free University of Brussels also underwent a schism into independent French and Flemish universities. In 1969 the government lent identical sums to Brussels and the Catholic University of Louvain to purchase new campuses. Meanwhile, the claims of Antwerp and Mons for advanced university course work were recognized, thereby giving both cities, in effect, full

universities. Thus, by 1971 the number of Belgian universities had doubled from four to eight, and in addition some lesser university-level institutions were added. The "University Finance and Control Law" of 1971 put all these institutions on essentially the same financial footing, with their full operating budget provided by the national government according to student-based formulae.

This new regime in Belgian universities has brought with it some internal changes. The student revolts of 1968 led to the establishment of a small degree of participation in university governance, and the 1971 law, as its title indicates, instituted significant administrative constraints over the formally independent institutions. But unlike some other European nations, in academic matters the authority of the Belgian professors has remained supreme. They define what constitutes university-level work, and they continue to maintain relatively rigorous standards. The continuity of academic standards may have benefited from the political struggles surrounding university expansion. Conflict revolved around the placement of institutions, the mode of finance and, above all, the language question, but this left little opportunity to call into question the academic operations of the universities.

In other respects the results of Belgian university expansion may have been more negative. Since many of the conflicts were resolved by granting all competing claims, Belgian conflict resolution has proved to be inherently expensive. As a result Belgium had the highest growth rate in the unit costs of higher education during the 1960s among OECD countries (OECD 1974, p. 181). In fact, after the settlements of both 1965 and 1971 the government was forced to scale down its original commitments to the universities. However, the negative side of this bounty has come only recently in the form of

cost-conscious administrative controls imposed upon the universities (Geiger 1978). The predominance of political considerations in Belgian expansion has virtually precluded long or even medium range planning. It is a painful irony that the last spasm of expansion was arranged in 1971 -- precisely the year in which enrollments levelled off. It is quite doubtful that this situation could have been fully foreseen, but a rational, incremental approach to the problem would certainly have avoided the considerable over-capacity that has been created. However, even to consider this possibility is unrealistic. The enrollment stagnation that suddenly struck Belgian universities was not an avoidable accident, but rather an inherent consequence of their nature and their recent history.

The maintenance of rigorous academic standards in Belgian universities has had the effect of limiting university study to a relatively small portion of the population (see Geiger 1978). Access to the universities is quite open, the only requirement being the maturité exam which 86% of secondary school graduates are able to pass. The real hurdle is the set of examinations at the end of the first year (first candidature). Belgian students are required to master a heavy curriculum of some ten or more courses, and then to pass the year-end exams as a unit, or else repeat the entire year's work. Year in and year out only about half of the first year students succeed. Diligence is obviously important, but the most crucial factor in success seems to be a strong academic preparation in secondary school. Students from the Latin tracks, in particular, show significantly higher rates of success (Table 1). For students in the modern tracks (excepting Math-Modern Languages A), unless they possess exceptional ability, waging a year's work in the first candidature presents rather poor odds. In recent years the growth in secondary school graduates has occurred in these modern programs,

TABLE 1 Success in First Candidature by Secondary School Program  
(Rijksuniversiteit Gent, 1974-75)

University average pass rate: index = 100

Latin-Math	142
Latin-Science	115
Latin-Greek	111
Math-Modern Languages (A)	100
Science-Modern Languages (B)	83
Commercial	53
Human Sciences	36

Average for General Secondary Programs 102  
Average for Technical Secondary Programs 55

Source: Bonte 1976.

\* \* \* \* \*

TABLE 2 Secondary School Graduates by Program: 1969 & 1975

	1969		1975	
Latin-Greek	7611	] 16,552	4287	] 16,555
Latin-Math	2310		3031	
Latin-Science	2768		4427	
Math-Modern Languages (A)	3863	] 11,747	4810	] 18,996
Science-Modern Languages (B)	4877		7662	
Commercial	6870		7892	
Human Sciences	---		2487	
Renovated General Secondary	---		955	
Total General Secondary	28293		35551	
Total Technical Secondary	21046		18226	

Source: Annuaire Statistique de l'Enseignement, XIV (1969-70), Bureau de Statistiques Universitaires, Rapport Annuel, 1976.

and has thus not represented an increase in the number of students prepared for university study (Table 2). In 1971 the entrance rate to Belgian universities reached almost 11% of 18 year-olds, but since then it has not pushed beyond that level. This figure, then, would seem to represent a kind of natural limit of the system as it is presently constituted. Any number of changes could, of course, disrupt this equilibrium, but at the moment no decisive forces of change seem to be impinging upon the system. Belgian universities are thus likely to continue to be relatively elite institutions. Their output, however, would appear to be only slightly below the "mass" universities of France. In 1975 Belgian universities produced almost 10,000 graduates (licences, medical doctors and engineers), a figure representing 6.8% of 21-year-olds. Recall that the figure for France in 1976 was only 7.2%, not including an additional 1+ to 2% graduating from grandes écoles. If an estimate of the foreign graduates were removed from these totals the percentage of university-level graduates per cohort would roughly equal 6% for Belgium, vs. 8.5% for France. It now remains to be seen how these levels of output are related to the vexing issues of equity and efficiency in higher education.

expenditures on higher education have historically compared poorly with other similar nations. In 1961 France ranked last among highly developed OECD countries in the percentage of G.N.P. devoted to higher education; in 1970 France was clearly last again with less than half of the average effort (OECD 1974). Since 1970 higher education's share of G.N.P. has declined considerably (Lévy-Garboua 1976). Real per-student expenditures have declined 20% from the plateau of 1965-70 (Lévy-Garboua 1976). An OECD study revealed that even in 1970 France was spending 25% more on each lycée student than it was on a student in the university (OECD 1977, p. 50). Direct comparisons with Belgium are particularly unflattering: in 1975 the French were spending \$1,337 for each university student while the Belgians were expending \$5,615--more than four times as much! (C.N.P.S. 1976; Secrétariat d'Etat aux Universités 1976).

Several conclusions might be drawn from this low level of support for higher education in France. A very small portion of these per-student expenditures are actually indexed to enrollments (unlike Belgium where per-student subsidies fund the entire regular budget of the universities). Therefore the marginal costs of accommodating more students in the university is extremely low--something one would never gather from government complaints about university waste. Given this situation, keeping students in the university is certainly cheaper than any form of unemployment compensation. But, perhaps the cost of the universities is too low. It is certainly possible that the parsimony of the government has been one of the principal causes of the pervasive devaluation of university study (cf. Lévy-Garboua 1976). One of the impossibilities of the second-cycle reform, for example, was the demand that the universities create new programs without new resources. It may well be, then, that the financial suffocation of the universities is

the chief obstacle to the government's own avowed policy of diversification. Moreover, at the moment there are a number of other factors favoring the success of this policy. University students in recent years have shown themselves to be highly mobile within the university and quite sensitive to the labor market outside of it (Lévy-Garboua 1977). These are both patterns that increase their likelihood of landing in programs that will be of most use to them in securing employment. Conditions thus seem to exist for the control of student demand through efficient market mechanisms.

The problem for the future is to develop and enhance the valuation of the quality programs that emerge. It is doubtful if this can be accomplished without additional sums to reward and stimulate successful innovation; it is also doubtful if it can be accomplished within the context of the general devaluation of university studies. To date France has largely attempted to adapt its universities to the exigencies of mass higher education by using the stick of centrally imposed directives; perhaps it is time to try the carrot of institutional incentives.

The problems faced by Belgian higher education are considerably different. There the universities have been accused of "living too liberally, carried along by lavish budgets." Coming from the Minister of French Education such sentiments are rather ominous, and seem to indicate that the pall of austerity will not soon be lifted (Le Monde de l'éducation, Sept. 1977, p. 27). However, the quality of hostility existing toward universities in the Belgian government is rather different from that found in the French, and does not call into question the underlying value of university education. Nor is there any reason to do so. The generous funding that the government reluctantly provides seems to assure Belgian students a high quality education, including access to well-stocked



libraries and the personal attention of their professors. As has already been explained, the very quality of this education, or rather its inherent difficulty, has constituted a natural limit to university expansion.

Belgium is consequently the only nation to attain mass higher education without any *numerus clausus* (excepting the faculties of applied sciences which, like French *grandes écoles*, have always admitted through competitive examination). Sentiment exists in Belgium both to make university admissions more restrictive and to grant wider and easier access. An important body of opinion also feels that social and economic changes as well as the adaptations made by other European countries "seem of necessity to impose important structural and conceptual transformations on Belgian post-secondary education" (Van de Vijvere 1977; cf. C.N.P.S. 1976). In the short-run, however, it is quite unlikely that any major reforms will be implemented. Recent experience makes it quite clear that major changes in Belgian higher education carry large price tags. And thus, the prevailing austerity virtually guarantees that the elite Belgian universities will continue to be anachronisms in the age of mass higher education--and comparatively speaking, rather successful anachronisms at that!

FOOTNOTES

<sup>1</sup> This is a slightly revised version of a paper prepared for A Conference of Europeanists sponsored by the Council for European Studies, March 29-31, 1979, Washington, D.C.

<sup>2</sup> Martin Trow has recently reevaluated his own model (1979), in part to account for discrepancies between the expected and the actual development of European higher education in the 1970s. He brings out the point, also crucial for this analysis, that although it is possible to use the terms "elite" and "mass" loosely to characterize evolutionary stages of the entire systems of higher education, the differentiation of functions requires that these terms be applied as well to sectors within systems.

<sup>3</sup> The desire to establish some form of selection in university study has been a ubiquitous undercurrent of government sentiment from the early sixties to the present. It would require a separate essay to do justice to this theme, however the salient points would include the following: the desire to establish selection upon credentials in 1966, which was only realized in the new IUTs; a serious effort to consider faculty entrance examinations before May 1963; the successful struggle to limit enrollments in medicine (1971); the largely unsuccessful attempt to make maîtrise programs selective in the second-cycle reform (1976); overcrowding in Parisien universities resulted in enrollment ceilings (1977), filled on a first-come basis (dubbed "selection by motorbike"); subsequently some Parisien universities have adopted the long-sought selection by academic qualifications; and finally, the proposed restructuring of the baccalauréat as envisioned in the Haby reforms which could reduce the number eligible for university study. Also see Lévy-Garboua (1977) for the growth of selective

sectors of higher education in France.

<sup>4</sup> The IUTs were intended to be more prestigious than the Sections de techniciens supérieurs, and eventually to supercede them (Van de Graaff 1976). In fact the two types have evenly divided short-cycle enrollments (see Statistical Appendix). Using an argument based upon game theory Boudon, Cibois and Lagneau (1975) have shown why short-cycle programs are unlikely to attract students from more prestigious, but vocationally more uncertain, full university programs. This case is buttressed considerably by the discussion of social recruitment in the universities in Part IV, below. The middle and upper-middle class students who predominate are least likely to accept the limited horizons offered by short-cycle programs.

<sup>5</sup> A recent study of the effects of open admissions in the City University of New York seems to reveal the same mechanism at work there as in France. In the authors' own words: "among the most educationally disenfranchised groups, Blacks and Hispanics, large proportions would not have been enrolled had it not been for open admissions . . . . While the open admissions policy was designed to bring about just such results, in so doing it also brought substantial benefits to whites, who, in fact, comprised the majority of open-admissions students." In addition, "white open-admissions students were better off, broadly speaking, than non-whites in grades, dropout and graduation rates, and the cumulative impact of these differences is much larger than any single one of them." David Lavin, Richard Alba & Richard Silberstein, "Open Admissions and Equal Access: a Study of Ethnic Groups in the City University of New York," Harvard Educational Review, 49, 1 (Feb. 1979), pp. 53-92; quotations from pp. 85-86.

REFERENCES

- Bonte, A. 1976. "Examenuitslagen in de Kandidatuur," Intermediair, 12-18 juni.
- Boudon, Raymond. 1969. "La crise universitaire française: essai de diagnostic sociologique," Annales, 24, pp. 738-764.
- \_\_\_\_\_. 1974. Education, Opportunity and Social Inequality. New York: Wiley.
- \_\_\_\_\_. 1977. "The French University Since 1968," Comparative Politics, 10, 1, pp. 89-119.
- Boudon, Raymond; Cibois, Philippe & Lagneau, Janina. 1975. "Enseignement supérieur court et pièges de l'action collective," Revue française de sociologie, 16, pp. 159-88.
- Bourdieu, Pierre, and Passeron, Jean-Claude. 1964. Les héritiers. Paris: Les Editions de Minuit.
- \_\_\_\_\_. 1970. La Reproduction. Paris: Les Editions de Minuit.
- Bourricaud, François. "La Réforme universitaire en France et ses déboires." Institut d'éducation, cahiers #3.
- Casadevall, André. 1976. In Le Monde de l'éducation, Oct. pp. 9-11.
- Conseil National de la Politique Scientifique (C.N.P.S.). 1976. Une nouvel stratégie universitaire. Bruxelles.
- Dore, Ronald P. 1976. "Human Capital Theory, the Diversity of Societies and the Problem of Quality in Education," Higher Education, 5, pp. 79-102.
- Drouard, Alain. 1978. "Le Mouvement de réforme de l'enseignement supérieur après 1945: permanence des ambiguïtés et sémi-échec," Collection des Actions Thématiques Programmées #25. Paris: Editions du C.N.R.S., pp. 87-131.
- Eicher, Jean Claude, and Mingat, Alain. 1975. "Education et égalité en France," in Education, Inequality and Life Chances. Paris: OECD, pp. 202-292.
- Fomerand, Jacques. 1975. "Policy Formulation and Change in Gaullist France: the 1968 Orientation Law of Higher Education," Comparative Politics, 8, pp. 59-89.
- \_\_\_\_\_. 1977. "The French University: What Happened after the Revolution?" Higher Education, 6, pp. 93-116.
- Geiger, Roger L. 1977b. "The Second-Cycle Reform and the Predicament of the French University," Paedagogica Europaea, 12, 1, pp. 9-22.
- \_\_\_\_\_. 1977b. "A Retrospective View of the Second-Cycle Reform in France." Yale Higher Education Research Group Working Paper #18.

Geiger, Roger L. 1978. "Universities and the State in Belgium: Past and Present Dimensions of Higher Education in a Divided Society." Yale Higher Education Research Group Working Paper #29.

\_\_\_\_\_. 1979. "The Changing Demand for Higher Education, in the Seventies: Adaptations within Three National Systems." Higher Education, forthcoming.

Grignon, C. and Passeron, Jean-Claude. 1970. Innovation in Higher Education: The French Experience Before 1968. Paris: OECD.

Herzlich, Guy. 1976. "Les Etudiants sont-ils de futurs chômeurs?" Le Monde de l'éducation, Oct.

\_\_\_\_\_. 1978. "Le Chômage des jeunes diplômés," Le Monde de l'éducation, Nov.

Husén, Torsten. 1975. Social Influences on Educational Attainment. Paris: OECD.

Jeanperrin, Didier. 1978. "Les Relations entre la formation et l'emploi: essai sur les desajustements actuels." mimeo. Paris: Institut d'éducation.

Lévy-Garboua, Louis. 1976. "Les demandes de l'étudiant ou les contradictions de l'université de masse," Revue française de sociologie, 17, pp. 53-80.

\_\_\_\_\_. 1977. "La sélection dans l'enseignement supérieur français: une synthèse des travaux statistiques récents." mimeo. Paris: OECD.

Organization for Economic Co-operation and Development (OECD). 1970a. "Educational Expansion in OECD Countries since 1950." Conference on Policies for Economic Growth, Background Study #1. Paris: OECD.

\_\_\_\_\_. 1970b. "Group Disparities in Educational Participation." Conference on Policies for Educational Growth, Background Study #4. Paris: OECD.

\_\_\_\_\_. 1971a. Development of Higher Education, 1950-1967: Analytical Report. Paris: OECD.

\_\_\_\_\_. 1971b. France: Examens des politiques nationales d'éducation. Paris: OECD.

\_\_\_\_\_. 1974. Towards Mass Higher Education: Issues and Dilemmas. Paris: OECD.

\_\_\_\_\_. 1977. Educational Expenditure in France, Japan and the United Kingdom. Paris: OECD.

Prost, Antoine. 1968. Histoire de l'enseignement en France, 1800-1967. Paris: Armand Colin.

Schriewer, Jürgen. 1972. Die französischen Universitäten 1945-1968. Bad Heilbrunn: Julius Klinkhardt.

Secrétariat d'Etat aux Universités. 1976. Le Financement des Universités. Paris: Documentation Française.

- Thurow, Lester. 1975. Generating Inequality. New York: Basic Books.
- Trow, Martin. 1973. "Problems in the Transition from Elite to Mass Higher Education," in Policies for Higher Education. Paris: OECD, 1974, pp. 51-104.
- Trow, Martin. 1979. "Elite and Mass Higher Education: American Models and European Realities" in Research into Higher Education: Processes and Structures, Stockholm: National Board of Universities and Colleges, pp. 183-219.
- Van de Graaff, John H. 1976. "The Politics of Innovation in French Higher Education: the University Institutes of Technology," Higher Education, 5, pp. 189-210.
- Van de Vijvere, J. 1977. "L'enseignement post-secondaire en Belgique entre l'évolution et la mutation," Paedagogica Europaea, 12, 1, pp. 41-62.
- Vedel, Georges. 1978. "Les enseignements de l'expérience française d'autonomie," Paedagogica Europaea, 13, 2, pp. 11-28.
- Verhoeven, Jef. 1979. "The Belgian Universities under Crossfire: Linguistic Communalism, Bureaucratization and Democratization," in Hans Daalder, ed., Legislatures and Universities, forthcoming.

BELGIUM

enrollment in <u>100s</u> (a)	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
18-21 years	4530	4311	4136	4150	4319	4617	5046	5323	5561	5750
University Enrollments	268	278	293	313	337	363	403	458	500	551
% of age group (18-21)	5.9	6.4	7.1	7.5	7.8	7.9	8.	8.6	9	9.6
Non-Univ. Enrollments	183	193	208	231	274	298	324	345	370	410
Technical & artistic	111	115	115	125	161	183	218	248	287	334
Pedagogical (b)	72	78	93	106	113	115	106	97	83	76
% of age group	4	4.5	5	5.6	6.3	6.5	6.4	6.5	6.7	7.1
Total Enrollments	451	471	501	544	611	661	727	803	870	961
% of age group	9.9	10.9	12.1	13.1	13.9	14.4	14.4	15.1	15.7	16.7
18 years	1043	930	1012	1165	1212	1228	1441	1442	1450	1417
Secondary School Graduates (preceding academic year)	104	103	113	134	156	178	208	248*	250	273
Diploma for Univ. Study (c) (preceding academic year)								112	195	216
New Univ. Enrollments (Belgian only)	56	58	62	68	72	79	92	111	113	124
New Non-Univ. Enrollments	89	94	105	118	138	150	161	169	180	185*
Total New Enrollment	145	152	167	186	210	229	253	280	293	309
% 18 years	14	16	16.5	16	17	18.6	17.6	19.4	20.2	21.8

\* estimated

Statistical Appendix - BELGIUM 1

BELGIUM -- continued

enrollment in <u>100s</u>	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78
18-21 years	5729	5701.	5704	5747	5817	5913.	5987	6067	6137	6207
University Enrollments	605	655	704	765	783	795	808	832		
% of age group (18-21)	10.6	10.6	12.3	13.3	13.5	13.4	13.5	13.7		
Non-Univ. Enrollments	464	487	510	516	586	650	657	699		
Technical & artistic	396	425	444	436	481	525	529	577		
Pedagogical	68	62	66	80	105	125	128	122		
% of age group	8.1	8.5	8.9	9	10	11	11	11.5		
Total Enrollments	1069	1142	1214	1281	1369	1445	1465	1531		
% of age group	18.7	19.1	21.2	22.3	23.5	24.4	24.5	25.2		
18 years	1420	1414	1453	1460	1490	1510	1527	1540	1560	1580
Secondary School Graduates (preceding academic year)	286	283	287	301	313	329	332	346		
Diploma for Univ. Study (preceding academic year)	235	240	244	278	301	298	292	333		
New Univ. Enrollments (Belgian only)	132	142	152	160	162	163	165	164		
New Non-Univ. Enrollments	205*	233	221*	224*	255*	283*	287*	302*		
Total New Enrollment	337	375	373	384	417	446	452	466		
% 18 years	23.7	26.5	25.7	26.3	28	29.5	29.6	30.3		

\* estimated



FRANCE	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
enrollments in 100s (d)											
19-22 years	25253	23126	22537	21704	21435	21793	22688	23969	26681	29189	31731
University Enrollments (e)	1861	1948	2034	2326	2708	3082	3489	3937	4332	4779	5400 5861
Short-cycle Technical (STS & IUT)	n.a.	n.a.	70	89	91	115	140	175	270	341	395
Classes prép. aux Grandes Ecoles	193	218	210	219	246	257	248	267	259	283	311
Grandes Ecoles Total(f)	424	442	482	518	546	591	628	n.a.			573
Engineering	173	187	208	225	236	240	253				289
Others (g)	251	255	274	293	310	351	375				283
Total Higher Education	2478	2608	2796	3152	3591	4045	4505				7140
% 19-22 years	9.8	11.3	12.4	14.5	16.8	18.6	19.9				22.5
19 years	5752	5751	5261	4940	5483	6108	6155	6221	8195	8617	8698
Baccalauréats (A-E) (preceding year)	477	491	593	614	662	755	867	969	1058	1333	1694
Technical Bacc. (F-H) (preceding year)											
New University Enrol.			469				814		969	1160	1482
% 19 years			8.9				13.2		11.8	13.5	17.

## FRANCE

enrollments in 100s	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
19-22 years	34157	34601	34484	34302	33955	33660	33435	33182	33202	
University Enrollments	6017	6270	6641	6998	7041	7186	7628	7712	7842	
Short-cycle Technical (STS & IUT)	438	512	602	676	742	832	897	907	918	
Classes prép. aux Grandes Ecoles	324	326	316	328	337	338	352	368	372	
Grandes Ecoles Total	536	611	613	673		632	679	638		
Engineering	293	310*	322	352		331	360	364		
Others	244	301	292	321		301	319	274		
Total Higher Education	7315	7719	8172	8675	8755*	8988	9556	9625		
% 19-22 years	21.4	22.3	23.7	25.3	25.8	26.7	28.6	29.		
19 years	8647	8639	8500	8516	8300	8344	8275	8263	8320	
Baccalauréats (A-E) (preceding year)	1227	1387	1437	1474	1503	1534	1537		1526	
Technical Bacc. (F-H) (preceding year)	143	286	343	368	409	453	508		555	
New University Enrol.	1276	1441	1544	1601	1791	1826	1987	1952		
% 19 years	14.8	16.7	18.2	18.8	21.5	21.9	24.	23.6		

## STATISTICAL APPENDIX

### NOTES

- (a) Sources: Annuaire statistique Belge; Annuaire statistique de l'enseignement, vols. 12 & 14; Bureau de statistiques universitaires, Rapports annuel. Also, Jose Van de Vijvere, "L'enseignement post-secondaire en Belgique: entre l'évolution et la mutation," Paedagogica Europaea, 1977, 1; and Jef Verhoeven, "The Belgian Universities under Crossfire: Linguistic Communalism, Bureaucratization and Democratization" in Hans Daalder, Ed. Legislatures and Universities, forthcoming.
- (b) Ecoles normal moyen (2 yr.) and Ecoles normal technique moyen (1 yr.), both for teachers of 12-15 year age group. Primary school teachers were not trained in post-secondary institutions until after 1971; however, this change considerably inflated recruits to the écoles normal moyen after that date.
- (c) The Diplôme d'aptitude d'accéder a l'enseignement supérieur was created in 1965. Prior to this only holders of a Certificat d'humanités were eligible for university study.
- (d) Sources: Annuaire statistique de la France; Services des études informatiques et statistiques, Ministère de l'éducation, Statistiques des enseignements: tableaux et informations.
- (e) Discontinuous series: 1958 to 1968 (upper number) represent students inscribed in the faculties--a restrictive definition of enrollments (however, see note f); 1968 (lower number) to 1977 are more inclusive figures conventionally used.
- (f) Discontinuous series: totals for 1958 to 1964 include approx. 40% double enrollments with faculties. See note g.
- (g) Due to severe irregularities in reported enrollments, totals for schools of beaux arts, languages and paramedicals have been eliminated from this category from 1968 on. This eliminates some but not all, of the double enrollments.

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