be charged. While student bills are not mailed to the individuals, they too represent actual charges against a general account supervised by the dean for student affairs.

It must be stressed that all user accounts are paid in real dollars. Supported accounts are paid with dollars granted to the college by outside agencies for the support of research. (Computer use is a direct expense in grant budgets.) Unsupported accounts are paid with dollars that come from tuition payments, endowment income, and so on. Since the billing rate, which has been audited by a federal agency, is identical for both classes of account, our free-access policy is consistent with federal regulations as expressed, for example, in *Circular No. A-21* of the Office of Management and Budget. The basic difference between the two types of account lies in the fact that unsupported accounts are not restricted by a predetermined budgetary ceiling. In no sense do students "use up" a budget for computing. The advantages of this accounting scheme over the more usual budgetary approach are many.

1) Students, whose net usage has been shown above to be a small fraction of the whole, are less inhibited and more independent in deciding whether, when, and how much to use the computer.

2) Teachers do not wait for "next year's budget" if they decide to assign computer use in a course or to begin a research project.

3) There are none of the usual budgetary incentives to consume one's entire allotment, for fear of a cutback the next year, or to stimulate a black market or barter economy in computer time.

4) Committees and deans do not waste time attempting to decide the proper amount of computer time allotted to each department.

5) Without dollars budgeted for computing, there is no basis for a department to attempt to convert "computer dollars" into "real dollars" to be spent for other needs.

6) Perhaps most important, faculty members with grant funds have not been able to make the computer center their captive and to distort university computing priorities for their own ends.

These advantages have come without sacrificing the need to account for usage, to bring abuse to light, and to charge externally supported projects for computer use. Approximately one-third of the total budget of the computation center derives from cash income from off-campus users and supported projects.

It can be countered that removing computing budgets from user control may restrict user choice and, in effect, make the user the captive of the computer center. In response, we first point out that in the overwhelming majority of universities, computing budgets now have to be spent at the computer center. These computer dollars are a kind of scrip, redeemable only at the company store. Secondly, and more fundamentally, we argue that there are other powerful and less potentially harmful mechanisms by which users can shape the policies and types of service at their computer center. For example, most universities have a library committee that acts as a user watchdog over library policies and service. Dartmouth has a parallel computer committee for the same reason. Finally, we reiterate that the process of establishing fair and rational budget amounts for computing is itself very expensive and fraught with difficulty and mistrust.

In light of this analysis of our experience in 10 years of free-access time-sharing, a university policy-maker elsewhere might well reconsider the available mechanisms for controlling computer use and give serious thought to providing the entire academic community with computer service modeled after the library service it now enjoys.

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NEWS AND COMMENT

European Community: Pragmatic Is the Word for the New "Europeans"

A year ago, the member countries of the European Community were mildly at odds over such things as their common agricultural policy and financing of regional development programs, but they were mainly occupied with adjusting to the arrival on the scene of Britain, Denmark, and Ireland as the Six became the Nine. Then chronic monetary problems worsened and last winter's energy crisis detonated to shake the Community to its foundations. Now, pessimists see the spirit of cooperation which nurtured the Community seriously eroded.

In recent months, the British Labour party has taken office with a pledge to renegotiate membership in the Community, the Italian government has applied draconian import restrictions in apparent contravention of the Treaty of Rome, on which the Common Market is based, and West German chancellor Willy Brandt has resigned as a result of a security scandal. These events and the death of French president Georges Pompidou have caused a number of observers to note that the present malaise of the Community is really a symptom of the political weakness of the member governments. By recent count, seven of the Nine had coalition governments and the other two, minority governments. Coalition politics is a way of life on the continent, but it is not a formula for maintaining momentum in either national or Community affairs.

Since the new year, the three dominant members of the Community, Britain, France, and West Germany, have seen new leaders take over. The defeat at the polls of Conservative prime minister Edward Heath in Britain, the resignation of Brandt, and the death

of Pompidou remove from key roles three leaders who in different but familiar senses were strong "Europeans." Brandt, perhaps most firmly of the three, retained the vision of a Europe moving steadily toward political union. Under Brandt, Germany functioned as the balance wheel of the Community. West Germany appeared to be the most politically stable of the major member countries, it consistently backed the "European" solution to problems, and the doughty deutsche mark was the strongest of the Community's currencies. And Brandt was viewed as generous in using his country's resources for Community purposes. Brandt's successor, Helmut Schmidt, who was Brandt's finance minister, is expected to take a different stance, to be more keenly aware of Germany's own problems and to take a dimmer view, as many German politicians do of other Europeans constantly "milking the German cow."

In the same way, Valéry Giscard d'Estaing, who was narrowly elected on 19 May to the presidency of the French Fifth Republic, will bring new attitudes to the post. Giscard served as finance minister under Gaullist governments, but he is not a member of the Gaullist party nor does he seem to share de Gaulle's "certain idea" of France and its destiny of leading Europe. Giscard is expected to be just as devoted to French national interests as his predecessors, but to show more flexibility within the Community on such matters as dealing with the United States.

In short, the new leaders are not like the founding fathers of the Community, such as Maurice Schumann and Jean Monnet, nor like Heath, Brandt, and Pompidou, who now look like transitional figures, though Heath and Brandt are by no means necessarily out of the game permanently.

The new men seem to view the expectations of the "Europeans" as exaggerated. More than their predecessors, Schmidt and Giscard seem to be technocrats and nationalists. On the matter of pressing forward on Community policy they seem to accept that the pressures of the times have forced a hiatus. The coming months and years are likely to test the newly created European institutions and to show which are durable and which not. The dream of European unity is not dead, but it is being redefined.

One sector in which the redefinition seems to be going forward is science and technology. This is perhaps surprising since the Community's science program has for years been stymied by the problems of Euratom, the Community's atomic energy organization. If there was a milestone marking a change in the fortunes of science and technology, it was the first Community summit meeting attended by the new member countries in the autumn of 1972. At this meeting the Community prime ministers gave a new high priority to science and technology in the Community context. Last year, Euratom was granted a 4-year budget after stumbling along on stopgap 1-year budgets since 1968, and a reorganization of the agency was decreed. The energy crisis gave impetus to energy R & D within the Community framework. The quest for a Community energy policy, which is complicated by the old bogey of national commercial interests, will be the subject of a later article. What follows is an account of the first small steps toward development of a genuine European science policy.

In a Hard Year in Brussels, Things Look Up for Science

Professor Ralf Dahrendorf of West Germany is the first commissioner of the European Community to head a separate department of research, science, and education. The new department was created when the commission was enlarged and reorganized after Britain, Denmark, and Ireland joined the Community at the beginning of 1973. Dahrendorf's transfer from responsibility for external relations—a major job on the commission—was regarded as an institutional put-down for a maverick. Now it seems generally agreed that Dahrendorf has done a good job with an unpromising portfolio, and there is some concern that the momentum established might not be maintained when Dahrendorf leaves Brussels next autumn to become director of the London School of Economics (LSE).

Dahrendorf has been something of a controversial figure in the Community executive, particularly in the period following his appointment in 1970. In West Germany he combined an academic career, most recently as professor of sociology at the University of Konstanz, with activity in state and national politics as a member of the Free Democrat Party. The FDP is the small, nonsocialist, "reform" party, which provides the parliamentary voting margin in West Germany's governing coalition dominated by the Social Democrats. Dahrendorf had acquired a reputation for outspokenness by the time he became parliamentary undersecretary of the West German foreign minister, and it has been suggested that this quality may have hastened his assignment to Brussels.

In Brussels, Dahrendorf generated a tempest through an article in the German weekly *Die Zeit*, which attracted wide notice in the European press because of its barbed criticism of the "Eurocrats" of Brussels. The article appeared under a pseudonym, but Dahrendorf was soon identified as the writer. Dahrendorf remained cheerfully unrepentant under a sharp reaction that included calls for his resignation and direct attacks on the floor of the European Parliament.

While his characterization of the Community executive of 5000 as a "bureaucratic leviathan" entangled in red tape drew the headlines, it was his questioning of prevailing assumptions about progress toward European political unification which probably accounted for the harshness of the reactions of some of his colleagues in the Brussels establishment.

In essence, Dahrendorf rejected the idea that member governments of the Community in the foreseeable future will agree to give up significant elements of sovereignty to a "federal" European government. He sees political unification in Europe evolving only after the member states of the Community further strengthen the web of relationships already begun, so that national interests eventually converge. He argued that a Europe of the "second generation" must undertake this task.

Dahrendorf has not changed his