And to Merriam he wrote: "I don't like McClung's way of instructing us to get the money. As a matter of fact, the more we do for the biologists, the more they want done for them." Kellogg had indeed been active in his efforts and was an influential trustee of the Rockefeller Foundation. As a trustee of the Carnegie Corporation and president of the Carnegie Institution, Merriam was constant in his efforts to aid the MBL as others at the Carnegie Institution had been during 20 years.

During this time that was critical for the future of the MBL and for the prestige of the NRC, Lillie succeeded McClung as chairman of the NRC Division of Biology and Agriculture. This was fortunate and appropriate. McClung could be querulous in his demands for support of science and thus irritate potential donors. Lillie, on the other hand, was gently tactful and persuasive. If the project were to succeed, it would be appropriate that Lillie be chairman at the time of success, for it was he who first proposed that the NRC create the building and thus secure the future of the MBL. His term as chairman started well with a letter from Vincent.

> The offer of the Rockefeller Foundation will hold good for any reasonable length of time. . . . I have talked with Pritchett at the Carnegie about the project. He is heartily in sympathy with it and may, I think, be counted upon to do all in his power to get a revision of the original action. There are some difficulties with which he finds it hard to cope. . . . If I can manage to drop in at Woods Hole this summer, I shall certainly make a point of doing it. In case I can make a visit, it will be "unofficial."

The personal interest aroused by that and other visits had far-reaching influence in the later development of the MBL and the Woods Hole Oceanographic Institution by Rockefeller philanthropies.

In appealing to those philanthropies such as the General Education Board and the Laura Spellman Rockefeller Memorial, Lillie and Kellogg enlisted the aid of Raymond Fosdick, who was, in a sense, the personal representative of the Rockefeller family in all the Rockefeller boards. Lillie also had the personal assistance of Crane who was a friend of John D. Rockefeller, Jr. And so it was through Crane, Fosdick, and Vincent that Lillie was able to interest Rockefeller in the MBL.

In December 1923, the secretary of the Rockefeller Foundation wrote to Kellogg: "The additional $400,000 needed for the Woods Hole project, *which came to our attention through the National Research Council*, has been pledged by Mr. Rockefeller personally." Crane then endowed his annual contribution of $20,000.

As chairman of the NRC Committee on the Marine Biological Laboratory, Lillie wrote: "Thus this project initiated through the Division of Biology and Agriculture has gone through to completion. The Committee accordingly recommends that it now be dismissed." Encouraged and inspired by the success of the endeavor, Lillie began at once to plan the Committee on Oceanography of the National Academy of Sciences, from which was born the Woods Hole Oceanographic Institution.

Notes

1. This account is mostly based on letters and documents in the archives of the National Academy of Sciences and on recollections of conversations with E. G. Conklin, F. Lillie, and C. E. McClung. For early history I am indebted to *The Woods Hole Marine Biological Laboratory* by Frank R. Lillie (Univ. of Chicago Press, Chicago, 1944). I am grateful for much assistance in searching records to my assistant Mabel Bright and to Jean St. Clair and Paul McClure, the Academy archivists.

NEWS AND COMMENT

Caspar Weinberger: Beware of an "All-Pervasive" Federal Government

His friends call him Cap. Others refer to him as Cap the Knife. As director of the Office of Management and Budget (OMB) and, then, as Secretary of Health, Education, and Welfare (HEW), Caspar W. Weinberger has been in a special position to influence the federal budget. He earned his sobriquet from his consistent efforts to drive federal spending down, or at very least, to keep it from expanding exponentially. He singled out programs that had, in his opinion, outlived their usefulness or proved to be ineffective. He suggested they be "knifed" out of the budget. But, as he noted a couple of years ago, one of the hardest things for the federal government to do is to *stop* doing something it has started. And, in fact, Weinberger's knife has not really cut very deeply at all, not nearly as deeply as he wishes it had.

This spring, Weinberger announced his resignation as HEW secretary and on 8 August officially left government service. In an interview with *Science* shortly before he departed HEW, Weinberger reflected on his years in office and his philosophy of government. He thinks government is getting out of hand. "My single overriding observation after all these years in Washington is of the growing danger of an all-pervasive federal government," he said, reiterating a statement made in his last major address as secretary.* "Unless checked, that growth may take from us our most precious personal freedoms. It also threatens to shatter the foundations of our economic system."

During the 5½ years that Weinberger was in Washington, the federal budget increased by 83 percent, from $196.6 billion in 1970 to $358.9 billion now. Weinberger wants everyone to know it is not his fault. He dislikes being thought of as Cap the Knife, he said, because it has a "negative" connotation, whereas he believes his position should be seen in a more positive light. "The unreasoning, automatic expansion of *all* programs simply can't work," Weinberger told *Science* in a tone that sounded more like a plea than a declaration. "There is a great reluctance in government to make choices. Look at New York City, staring into the abyss. It may be forced to do what we in the federal government ought to be doing."

As director of OMB, Weinberger had a budgetary hand in every aspect of government, but, as he admitted, from that vantage point it is hard to penetrate deeply into any single one. The view from HEW is more focused, but hardly more manageable. HEW comprises one-third of the federal budget, a sum larger than the budgets of many countries, and it keeps getting bigger. Weinberger is worried about it. "There is an overriding danger inherent in the growth of an American welfare state. The danger simply is that we may undermine our whole economy. If social programs continue growing for the next two decades at the same pace they have in the last two, we will spend more than half of our whole gross national product for domestic social programs alone by the year 2000. Should that day ever come, half of the American people will be working to support the other half."

During his tenure in office, Weinberger made a number of specific suggestions about how the government should save money. One area that he believed suitable for reductions in federal spending is in

* "A View of the Federal Government," delivered 21 July before the Commonwealth Club of San Francisco.

manpower subsidies for certain professions. For example, he thinks the government should not subsidize the education of potential public school teachers when we have too many already. It is well known among biomedical researchers that he favored the elimination of training grants in that area. And, even though some training grants were restored, he still believes the question of subsidies for the education of medical students needs further review.

Weinberger, convinced that the nation has 60,000 to 70,000 more hospital beds than it needs, argued for an end to federal support of hospital construction under the Hill-Burton bill. He wanted to end support of regional medical programs and community mental health clinics. On the welfare front, he called for the abolition of aid for dependent children, food stamps, and social security insurance "right now," to be replaced with a "simple cash grant, based on need, measured by income, and payable only to those who meet a strong work requirement."

It is easy to see why people call him Cap the Knife. He defends his position, saying the programs he cited, among others, cost too much and are too little considered. "Those programs, a $50 bonus for everyone on social security and an earned income credit, were adopted in a single afternoon without an hour of committee hearings or debate. Together they added another $4.2 billion to our welfare bill." Weinberger, a conservative Republican who endorses the traditional values and virtues of free enterprise, maintains that government's beneficent intentions can lead the country straight to bankruptcy. And, he says, unlike New York City, which may find someone to loan it enough money to keep it going for a while, "there will be no one with enough resources to rescue the federal government" as it reaches the brink.

After saying all the expected things about the gratifications of public service, Weinberger is frank to admit that he has felt very frustrated in his efforts to impose fiscal restraint on the budget process. "All avenues of reducing expenditures are closed now, except through the Congress," he points out, adding that he has little confidence that Congress will be willing to go along with budget cuts—at least, not in the near future.

At first, Weinberger recalls, he put most of the blame for what he considers budgetary excess on Congress which is not psychologically constituted to say "no." He remembers his confirmation hearings almost 3 years ago and an exchange with Senator Jacob K. Javits (R–N.Y.) which, Weinberger believes, is representative of the congressional approach to issues and programs. "Javits said something to this effect: 'My worry is that you are not going to be an advocate for all programs in HEW.' Of course, he was right, and I said so."

Weinberger attributes many of the current strains on the federal treasury to a Congress whose actions are determined, in large part, in response to advocacy. He believes that a high proportion of members of Congress sympathized with, and even shared, his position that certain programs should be phased out or cut back. But, he says, "It just was not politically acceptable for them to act that way. So, when we would urge the end to Hill-Burton or regional medical programs, congressmen would say, 'Don't abolish these ineffective

Weinberger on Affirmative Action

Faculty members and administrators at colleges and universities throughout the country are confused, in fact somewhat frustrated, by federal guidelines for affirmative action. What many of them see in the federal rules is the specter of a quota system for hiring and promoting women and members of minority groups even if it means sacrificing academic quality. Weinberger, who as Secretary of HEW was responsible for enforcing the law in this area, is sympathetic to the universities' frustrations.

The Department of Labor regulations on affirmative action in employment, which HEW administers in academic institutions, were designed to apply to breweries, factories, stores, and such, not just colleges, Weinberger observed in an interview with *Science*. "But colleges are not just dealing with clerks, and the regulations do not always fit the problems of developing a faculty. Some colleges feel they're being told to hire 1.8 women in oriental studies, or whatever, or else lose federal funding."

The Department of Labor regulations essentially require employers to look back over data on hiring patterns to see how many women and how many members of various minorities have been working in one position or another. It leaves universities with the presumption that they have to identify employment patterns department by department, rather than university-wide. Ironically, Weinberger points out, the data all employers are now required to produce are based on information that, until recently, was illegal to collect. "In the past, if you kept records of your employees' race or sex or age, it was considered de facto evidence of an intention to discriminate."

Weinberger calls the present approach to equal opportunity "wholly statistical and mechanistic," adding that universities are spending a fortune in time and money to come up with plans to meet the regulations but that the mechanistic approach does not really contribute to getting the job done. "The thing that we want universities to do is broaden their base of recruiting, to make it national, so that numbers of persons have an opportunity to compete for a position. But once they've done that, they should appoint whom they think best, even if it is a white man. You have to avoid reverse discrimination, too."

Last December, HEW interpreted the existing codes applying to affirmative action in a "memorandum to college and university presidents," signed by Peter E. Holmes, director of HEW's office of civil rights, but drafted in large part by Weinberger himself. The memo gives several examples of hiring situations and instructions on how they should be handled. Throughout, Weinberger says, he is emphasizing that the regulations call for "good faith attempts" to offer equal opportunity, not quotas to be strictly and mindlessly met.

However, it is not at all clear now that Weinberger's interpretation necessarily prevails. Even he admits that many people in HEW have tended to a strict application of the regulations. "The attitude in this department has been that you didn't question the sense of these rules for fear of appearing red-neck." Now, even if HEW officials are following the outgoing Secretary's philosophy in this area, there is plenty of evidence that they are being challenged by persons who want more hard-nosed enforcement. "Our emphasis on good faith efforts does not please some of our constituents," Weinberger noted. "That is clear enough. At the moment, I'm a defendant in some 7500 cases, many of which challenge HEW's affirmative action stance." The situation now is such that, however HEW or academic institutions interpret the regulations, no matter who is hired, chances are good that someone will find grounds to bring a suit.—B.J.C.

programs. Tell us how we can make them better.' "

Thinking back in recent months on his years in Washington, Weinberger, who is continually rumored to be planning a political career of his own, says he now sees a more basic explanation for congressional behavior. "Congressmen hear constantly from special interest groups that want to promote some social cause. They are asking for new money, or more money, and can support their claims with plausible arguments. And Congress responds." In this, Weinberger observes, Congress is indeed following the will of the people—at least those people from whom it hears. Weinberger thinks that Congress needs to hear from more people, namely, from those who will be the 50 percent supporting the other 50 percent of the nation if his grimmest predictions come true. "I think there is increasing public awareness of the dangers of big government. At least I hope that is true. Taxpayers need to be better organized. A few write their congressmen and say 'spend less,' but they don't pinpoint programs and their approach is far less effective than those lobbying *for* a specific social project."

Weinberger puts the scientific community—particularly biomedical researchers with whom he had occasion to deal as HEW secretary—into the same category as all other special interest groups, with only one difference. He takes the recent, politically determined increases in the budgets of the National Cancer Institute and the National Heart and Lung Institute as

Caspar W. Weinberger

an example. From Lyndon Johnson on, he notes, all presidents have written increases for cancer and heart research into their budget requests, and Congress not only has gone along with them but has added to them. "This was a presidential and congressional policy decision," says Weinberger, and not one actively advocated by HEW. In fact, Weinberger claims never to have gone to the White House to push for either program. What bothers him about the scientists who protest those two budget decisions is not that they disagree with the result of the political process but that they challenge the right of the President and the Congress to engage in it. "The argument I hear from scientists that this is not a legitimate part of the political process is *nonsense*, and quite different from their saying that they don't like the decision."

On the matter of stabilizing the budget of the National Institutes of Health (NIH) by assuring it some specified rate of increase every year—something NIH directors have expressed a desire for—Weinberger also sees the research community as a group like any other. "Everybody wants a stabilized budget with guaranteed growth. Defense wants it, for instance. Many states have it, in the form of fixed amounts of gas taxes going to highways and such. But I think the budget planning should be related to programs, which can change."

Weinberger is certainly not optimistic about the prospect of everybody seeing things his way as long as fiscal disaster can be skirted but he does predict that the present monumental troubles facing New York City will have a salutory effect on the nation as a whole by dramatizing the dangers of an all-pervasive government incurring huge deficits for social programs that bring as many burdens as they do benefits.

In the final analysis, however, Weinberger does have a certain faith that the country will act to avert fiscal disaster. He is returning to the world of private enterprise which, he believes, "has brought more benefits to more people at home and throughout the world than any other system since recorded history began." Says Weinberger, who is a Californian, "I'm going back to San Francisco to see if the private sector is as good as I've been saying it is."

—BARBARA J. CULLITON

New Jersey Higher Education: Back from the Brink

Like most states, New Jersey has suffered a shortfall in revenues caused by inflation and recession. In recent months, a clash over how to cover a state budget deficit led to a chaotic political chess game between Governor Brendan T. Byrne and the legislature in which higher education became one of the pawns.

At one point it appeared that 1200 members of the state university staff of 7000 might have to be fired and that agricultural research at the university would, for all intents and purposes, be wiped out. Such drastic action was averted, as most informed people thought it would be, but the compromise reached was actually a stopgap which defers the state financial crisis rather than solves it.

To say simply that New Jersey faces a financial crisis fails to do justice to the complexities and oddities of New Jersey's traditions, prejudices, and politics. More than in most states, government there has been regarded as a local affair and the state government has neither provided the services expected elsewhere nor levied the taxes needed to pay for them. Most notably, New Jersey, a rarity among states, does not have a state income tax.

Not until the middle 1960's did New Jersey make a serious effort to establish a state system of higher education. New Jersey has been known as "the cuckoo bird state" for the numbers of its residents who attend college in other states.

A full-fledged, three-tiered higher education system came into being in New Jersey only in 1967. The main provider of graduate and professional education is Rutgers (officially termed Rutgers, the State University) with a main campus at New Brunswick and new campuses in Newark and Camden. The New Jersey College of Medicine and Dentistry oversees two public medical schools and a school of dentistry, and a New Jersey Institute of Technology is based on the former Newark College of Engineering. There are eight state colleges, including six former teachers' colleges that have undergone major expansion in facilities and programs. Nineteen community colleges are jointly funded by the state and counties.

Planning and coordination for the state