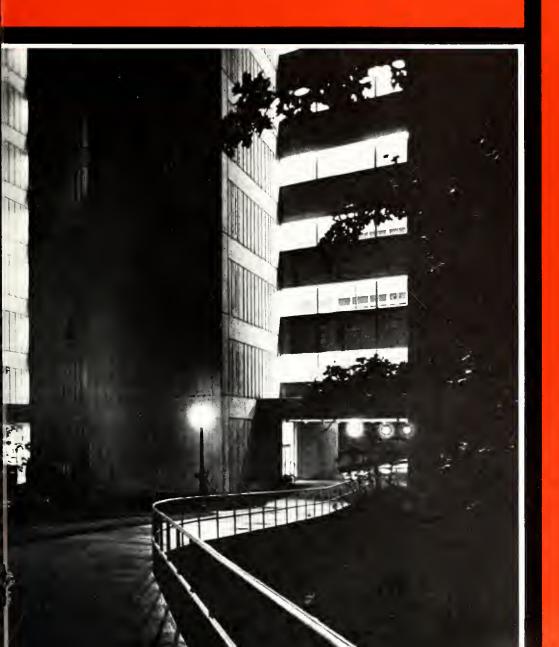
POPULAR GOVERNMENT

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This month

Mining controls

What to tell the patient

Sex education

Local government debt administration

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This month's cover pictures a new addition to the University at Chapel Hill—an annex to Venable Hall. All photos by Carson Graves.





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The Development of Surface Mining Legislation in North Carolina Since 1967

by Joseph F. Jadlocki, Jr.

Beginning about five years ago, the growing public awareness of environmental concerns began to be reflected in legislation passed by the North Carolina General Assembly to establish controls over the state's mining industry. Three pieces of legislation—the Interstate Mining Compact enacted in 1967, the Mining Registration Act of 1969, and the Mining Act of 1971—have brought North Carolina abreast of the nation's leading states in the area of surface mining control. Throughout the efforts to have these laws passed, the aim of the General Assembly and the advocates of legislative mining reform has been to establish a legal basis for insuring land reclamation in these areas of mining operation where surface damage is likely to occur.

This article follows the course of events in 1967 that supplied the incentive and finally the means for legislative mining reform in North Carolina.

BACKGROUND

North Carolina is said to have the greatest variety of minerals and rocks of any state in the Union. Seventy of these have economic value, and some forty or fifty have been produced in commercial amounts.

The state's history since colonial days indicates its potential mineral wealth. Gold was discovered in North Carolina in 1799, and systematic mining for gold began about 1802. From 1804 to 1828 North Carolina produced all of the gold mined in the

United States, and it remained the leading gold producer until the California gold rush of 1849. But as the easily accessible surface gold was depleted, the mines closed, and the North Carolina gold indust rapidly became a thing of the past.

Some of the other more glamorous and, of covpopular minerals in North Carolina are the g Among the more popular gem stones to be found in North Carolina are emerald, feldspar, garnet, hiddenite, opal, ruby, sapphire, and quartz. The gems are not mined commercially, but hundreds of "rockhounds" eagerly comb the hills of North Carolina in search of them. Particularly in the western part of the state, owners of old mining sites charge a small fee granting permission for part-time gem-seekers to rummage their grounds, Occasionally such forages pay off. The Southern Pines Pilot recently carried a story of a local resident's find in 1966 of a 1,500-carat grouping of emerald clusters of such fine quality and size that the Smithsonian Institution has shown great interest in acquiring the group as a display item.

Perhaps less exciting but certainly of greater economic import to North Carolina than the gems are such minerals as lithium, mica, and feldspar. The state leads the nation in annual production of these materials. It also ranks second or third nationally in the production of olivine, tale, and pyrophyllite.

Nevertheless, the mineral resources most valuable to the state economy are common garden-variety stone and clay materials. In terms of tonnage, stone is the most important. In 1967 the state produced a volume of 24.5 million tons of crushed stone valued at \$41.5 million—53 per cent of the total value of state mineral production. North Carolina also produces a great quantity of bricks; in 1968 860,500,000 bricks valued at \$25.4 million, 11.4 per cent of the total U. S. production, were made in this state.

Chatham, Lee, Stanly, Stokes, and Union are the counties primarily responsible for this clay production, and Cabarrus and Macon counties are the lead-

ing sources for stone products.

A more recent display of mineral resources is found in North Carolina's coastal region. In 1966, the Texas Gulf Sulfur Company initiated phosphate mining operations in Beaufort County. These phosphate deposits, located in the vicinity of Pamlico River and Pamlico Sound are said to be the largest in the nation and have pushed North Carolina to the forefront as a producer of phosphate fertilizer minerals

Over the past decade the mineral industry has grown enormously. In 1942 the mineral production totaled \$16.4 million; in 1968, \$83 million; and in 1971, \$95 million. These advances are inevitably a great boost to the state's general economy. Yet this development is not without its costs.

By 1970, North Carolina had 350 mines operated by 176 different companies. The State Highway Commission also maintained 250 borrow pits for road construction. These operations covered about 8,000 acres of mined land; statewide, about 800 acres are given over to new mining operations per year. Except for one underground talc-mining operation in Cherokee County, all of North Carolina's mineral production comes from open pit or surface mining operations ranging in area from a few to several hundred acres.

As of January 1965, 36,810 acres of land in North Carolina were disturbed by surface mining; of these, an estimated 22,800 acres required reclamation of some type. To keep these figures in perspective, this compares with between 100,000 and 200,000 acres of mined land requiring reclamation in each of the states of Ohio, Pennsylvania, and West Virginia. These figures, as well as the realities of the burgeoning mining industry, sparked the movement toward legislative control.

Although not saddled with reclamation problems as extensive as some coal mining states have, North Carolina has become aware of the demands of its citizens and administrators that the state's land resources be protected from the potential ravages of its own mining industry.

OUTRAGED ORANGE

If the Raleigh News and Observer and the Chapel Hill Weekly are right in their implications about cause-and-effect relationships, North Carolina may The author was a student in the water policy course taught by Milton S. Heath, Jr., the Institute's specialist in water resources. This article is adapted from a paper written for that course.

well be deeply indebted to Texas Gulf Sulfur for stimulating some of the demands for natural resource protection that eventually produced the mining control legislation.

Following a chain of events involving the Texas Gulf Sulfur Company (hereafter designated T.G.S.) and its phosphate mining operations in the Pamlico River, the North Carolina General Assembly enacted two significant water laws. These laws were the product of the 1967 North Carolina legislature that had merged the old Board of Water Resources and the Stream Sanitation Committee into a unified Board of Water and Air Resources and had given the new board authority to designate "capacity-use areas"—that is, areas in which water-use problems justified state intervention and regulation.

Then, while T.G.S. was suffering a credibility crisis with respect to ground-water depletion in Beaufort County, it announced the possibility of mining some mineral deposits near Chapel Hill in Orange County. The local outrage and fear that followed this announcement in the Chapel Hill Weekly for April 2, 1967, could not have been predicted. Neither could the legislative innovations that would culminate with the Mining Act of 1971 six years later have been foreseen.

Hard on the heels of T.G.S.'s surprise announcement, the Chapel Hill Weekly quickly sounded the alarm to the Orange County citizenry. A week after the announcement, the Weekly printed an article entitled "Orange Prospect: Vast Wasteland," in which the chairman of the Department of Geology at the University of North Carolina at Chapel Hill said that plans to mine local mineral deposits would destroy the area's ecology as similar mines (open pit) had done at the copper works in Ducktown, Tennessee; Bingham, Utah; and Butte, Montana.

These immediate responses were based on the supposition that T.G.S. was interested in deposits of copper or related ores, known to be a part of the geology of the region surrounding Chapel Hill. In the absence of any word from T.G.S. officials as to the real subject of their interest, even gold deposits were tonjectured.

On April 16, T.G.S. announced that it had obtained mineral options on 440 acres in two separate plots north of Chapel Hill. Attempts by the company to obtain options on parts of Duke Forest owned by Duke University were unsuccessful.

Area concern mounted as officials noted that the recently adopted local zoning ordinance permitted mining operations in residential as well as industrial areas. Furthermore, there was no state provision requiring land reclamation after mining operations. As

the Durham County and Orange County delegations to the General Assembly expressed grave concern over the possibility of strip mining in their region, James C. Wallace, a staunch Tar Heel conservationist, urged prompt introduction of legislation in the General Assembly as the quickest and most effective means of curbing any mining by T.G.S.¹

The Orange County Planning Board was eyeing another avenue for controlling mining ventures. By April 19, the planning board requested the Research Triangle Regional Planning Commission in cooperation with the Institute of Government to consider specific revisions of existing county ordinances concerning extractive uses of land.

Several days later at a special meeting of the Orange County Board of Commissioners, Philip G. Green, Jr., of the Institute of Government, outlined the possible protective measures that could be taken by county officials: (1) Acquire the optioned land through eminent domain for public use, (2) utilize zoning authority by extending the Chapel Hill Township zoning ordinance to the remainder of the county and amend the ordinance to include more restrictions on strip mining, or (3) rely on private suits against the "nuisance effects" of mining operations.²

At this meeting State Geologist Stephen Conrad of the State Department of Conservation and Development (C&D) discussed the Interstate Mining Compact, under which a group of at least four states would draw up uniform mining laws aimed at land rehabilitation. The notion for such a multi-state compact arose from a 1964 Southern Governors' Conference and was given further impetus by the Council of State Governors in 1964. Conrad said that the Department of C&D supported such a compact. As head of C&D's Division of Mineral Resources, Conrad had been working to build support for the compact idea for several years. The interest aroused by the Orange County mining prospect encouraged Conrad to hope for early realization of the long-sought compact goal.

On May 19, 1967, the News and Observer took note of the Orange County mining scares with a headline story entitled "North Carolina Officials Take Hard Look at Mining Laws." The article pointed out that "while Orange County officials are looking at their zoning laws as a means of protecting their land against the effects of strip mining, others are considering statewide laws to regulate mining and other operations that affect the state's natural resources." It quoted several specialists in the field: W. E. Knight of the State Board of Water Resources suggested that existing state laws on water pollution would protect the streams of Orange County and that the size of the streams in the county might serve to discourage strip mining, as the cost of waste treatment before dumping into the stream probably could not be justi-

Chapel Hill Weekly, April 19, 1967.
 Chapel Hill Weekly, April 23, 1967.

fied unless substantially large mineral deposits were discovered. W. T. Wilson of the Mineral Resources Division, in discussing the possibilities of an Interstate Compact, observed that the compact would need four states and that Florida, Kentucky, and Pennsylvania were interested in joining. Philip Green of the Institute of Government predicted that because writing a mining law to "get at what you want to get at" was so difficult, statewide legislation probably would not be prepared by the 1967 General Assembly. But he added that the Orange County commissioners were definitely considering zoning laws to protect their immediate concern about strip mining in the county. Green said that by extending the Chapel Hill Township zoning laws to cover the necessary areas of the county, the commissioners could require a mining company to apply for a permit and present plans for operation and rehabilitation and also to post bonds to insure rehabilitation.3

As opposition to any proposed mining activity by T.G.S. in Orange County gathered force, the Institute of Government and the Research Triangle Regional Planning Commission drafted an ordinance to control mining and mining activity, and on May 22, 1967, the Orange County Planning Board recommended that it be adopted. The proposal included the establishment of two new zone classifications to which mining and mineral processing would be confined and the requirement that any mining operation obtain an extractive-use permit. Before any such permit could be obtained, however, a mining enterprise would be required to submit to a county review committee an operations plan and program, a rehabilitation plan and program, and a rehabilitation bond equaling the estimated cost of land reclamation. These restrictions, plus the strict controls placed on ground water, surface water, and air pollution, prompted one planner to remark that if adopted these regulations would be the strictest controls of water and air pollution he knew of. The managing editor of the Chapel Hill Weekly agreed: "The Orange County Planning Board has recommended adoption of strip mining controls possibly as forceful as any in the United States."

On May 30, 1967, the Chapel Hill Township zoning proposal sailed through a public hearing in Hillsborough virtually unopposed. At the same time residents of Eno and Bingham townships requested that zoning be extended to their areas, despite normally heavy opposition to zoning in rural Orange. On June 8, the Orange Planning Board endorsed the mining curbs and recommended adoption.

On Monday, June 12, a special meeting was held with considerable debate and some reservations about whether the new zoning ordinance amendments could stand a legal test. Finally, however, the county commissioners unanimously enacted the amendments into law.

^{3.} News and Observer (Raleigh), May 19, 1967.

Almost inevitably, two days later a T.G.S. representative announced that the firm was quitting Orange County and releasing the mineral options it had claimed there. The *Chapel Hill Weekly* noted, "It will probably remain a permanent conjecture whether the company left because of protest or because in the General Assembly pressure was mounting to regulate ground water depletion in Beaufort County and strip mining throughout the state." It is possible that in the face of a two-pronged attack, the firm sought to protect its established operation in Beaufort at the expense of a speculative adventure in the hills of Orange.

Perhaps spurred by the mood in Orange County, House Representative Norwood Bryan of Cumberland County introduced a bill to the General Assembly in June of 1967 that was designed to control strip mining on a statewide basis in North Carolina (HB 1332).

Bryan's bill, patterned after regulatory legislation on strip mining in Pennsylvania, Kentucky, and Indiana, would have required a mining operator to obtain permits from the Department of Agriculture and the newly established Department of Water and Air Resources. Before such permits would have been issued the operator would have had to submit for approval a plan of reclamation for its mining operation. After receiving the permits, the operator would have been further required to post bond with the Commissioner of Agriculture at an amount estimated to cover the cost of reclamation. Bonds were to be set in the range of \$100 to \$2,000 of lands affected, with a minimum bond of \$2,000. Costs for implementing this program would be covered by a fee of S50 for the permit plus \$25 per acre of affected land.

Just one day after T.G.S. announced its withdrawal from Orange County, Bryan's bill was sent to a two-man subcommittee of the House Calendar Committee for further study.

THE STATE MINING COUNCIL

In the end, Bryan's bill was not enacted. Nevertheless, the Assembly did adopt the Interstate Mining Compact, bringing to fruition the efforts of Stephen Conrad and the State Department of Conservation and Development.

North Carolina's entrance in 1967 as a member of the Interstate Mining Compact represented a milestone in the state's growing awareness of the problems facing its mining activities. Each member state of the Compact is committed to formulating an effective program for the conservation and use of mined land through the establishment of standards, enactment of laws, and the continued enforcement of laws already established.

The compact legislation established an Interstate Mining Commission composed of one commissioner from each state and creates a State Mining Council to serve as an advisory staff to the state mining commissioner. The Mining Council membership was set at thirteen. The Governor was to appoint eight, who were to include state administrative officials, members of the General Assembly, representatives of mining industries, and representatives of nongovernmental conservation interests. One senator was to be appointed by the Lieutenant Governor, and one House member by the Speaker. The remaining three members were to serve ex officio.⁴

Appointments were made to the State Mining Council in late 1967, and an organizational meeting was held in February 1968. To gain firsthand knowledge for their assignment, Council members conducted field trips to various mining operations throughout the state. The Council then sponsored public hearings in November in Raleigh and Asheville in an effort to give all those concerned a chance to express their views on developing a state program for the conservation and use of mined land.

INTERIM LEGISLATION IN 1969

With the approach of the 1969 legislative session, the State Mining Council submitted a report to Governor Robert Scott summarizing the results of its eighteen-month study of the status of North Carolina's mining industry.⁵ In this report the Council stressed the significant growth of the mining in the state in the preceding twenty years and tried to identify environmental hazards and problems that existed as either the direct or indirect result of the industry's expansion. Cited by the report as areas of environmental hazards requiring some degree of attention were: pollution of air and water, mining wastes disposal, and reclamation of mine-out areas. Recognizing that adequate authority existed for water and air pollution within the Department of Water and Air Resources, the Council stressed the lack of state authority to control noise pollution, a problem in some areas of mining. The report noted that slimes resulting from flotation processing of mica, feldspar, and phosphate as well as washings from sand, gravel, and crushed rock were a major waste disposal problem. Finally, the council emphasized the lack of any established statewide legal tool to guarantee the reclamation of mined-out regions of the state.

The council's report made recommendations to be considered separately by the 1969 and the 1971 General Assemblies. The recommendations to the 1969 session contained two significant proposals: (1) Inasmuch as the fourth state was yet to join the compact, the council should not be dependent on the formalization of the compact and should continue as a statutory body advisory to the Governor; and (2) a surface mining registration act should be adopted and an experienced mining engineer or other technically qualified person employed to implement such a pro-

^{4.} N.C. GEN. STAT. §§ 74-37, 38.
5. Mining Council Report, A Proposed Program for the Regulation of Mining in North Carolina, April, 1969.

gram. Three recommendations were to be considered by the 1971 General Assembly: (1) Designate a state agency to regulate the mining industry; (2) designate the legal responsibility for the reclamation of minedout land; and (3) adopt an expanded licensing program that required a proposal of conservation and land reclamation procedures to accompany an application for licensing.6

In a summary statement, the council expressed the opinion that the state had no major problem with respect to its surface mining (at least, not as compared with other states), but it advocated that necessary precaution be taken against major environmental problems that had occurred in other states. Not least among the reasons for the council's urging of the General Assembly to lay plans for mining controls was that, if the state had a mining control program, it would find itself in an advantageous position if and when a national program of mining regulations was adopted.

In the midst of the State Mining Council's efforts to develop guidelines for a state program of mining controls, an offer of assistance came from T.G.S. T.G.S. spokesman Lucius Pullen said in a Raleigh meeting of the Mining Council that the company's reclamation program then in progress at the Lee's Creek mining facility in Beaufort County should serve as a fine example and perhaps a model for designing legislative controls to enforce land rehabilitation throughout the state. He said that the Lee's Creek efforts could be summarized in three words-"cattle, trees, and grass"—and that eventually 10,000 head of Angus cattle would graze on the land. He also cited T.G.S.'s initiative in employing soil scientists from North Carolina State University to help in the company's revegetation efforts.

Without further ado, the 1969 General Assembly enacted the Mining Registration Act of 1969. This act fully implemented the two significant proposals that the Mining Council had made to Governor Scott. The position of State Mining Engineer was created in the Division of Mineral Resources of the Department of Conservation and Development, A qualified individual was to be appointed to this post by the Director of the Department of Conservation and Development on recommendation by the State Geologist. The duties of the Mining Engineer were to include administering a mining registration program within the state whereby all mining operations affecting more than one-quarter acre of land would be required to secure a registration certificate. Certification was to be achieved by merely providing information concerning the mining operation, including a summary of present and proposed conservation and land reclamation plans and procedures if any. The act also provided instructions for the Mining Council to recommend legislation to the 1971 General Assembly that would incorporate these three goals: (1) Desig-

nate a state agency to regulate the mining industry, (2) specify the legal responsibility for reclamation of mined-out land, (3) create a system of licensing to insure proper resources conservation and land reclamation.7

FURTHER FUROR

By January 1970, new developments in mountainous western North Carolina gave further momentum to the drive under way to establish mining controls.

During January it was announced that the Gibbsite Corporation (hereafter designated G.C.), a subsidiary of Colonial Oil and Gas Corporation, had obtained mineral leases for between ten and fifteen thousand acres in North Carolina and Virginia. The parent corporation listed the North Carolina counties of Surry, Ashe, Alleghany, and Wilkes as containing locations of Gibbsite's mineral leases to mine the sand-like mineral gibbsite.

Gibbsite had until then been ignored as a source of alumina (aluminium oxide) because it was so difficult and expensive to separate from the soil, but G.C. hoped to use a secret new process for efficient recovery or extraction of the alumina from the gibbsite sand. A G.C. spokesman claimed that with the new process and the rich deposits of gibbsite, the corporation could be the largest domestic producer of alumina in the United States.

Just like their Orange County counterparts three years earlier, the populace in the regions near the gibbsite leases set up a steady clamor concerning the lack of adequate legal protection against the potential ravages of the mining industry. Several issues of the Winston-Salem Journal-Sentinel conjured up visions of the devastated regions of Kentucky and West Virginia, where heavy stripping for coal had permanently altered or scarred the land surface. One lesson stressed in these articles was that even with adequate legal enforcement of land-reclaiming practice, no reclamation process could adequately reclaim a steep slope after the mining had removed its surface soils and vegetation.

In the face of the new pressure for mining reform, Henry B. Smith, chairman of the North Carolina Mining Council, wrote to Governor Scott that water and air pollution laws were adequate to deal with environmental problems related to mining at this time and further that county governments had broad powers with respect to zoning to protect their own interests (witness Orange County, 1967).8 The Mining Council, however, made it known that it did not encourage such local regulations on mining practices in view of the statewide laws on the subject that were in preparation.9

Concern over the status of G.C.'s interests in North Carolina continued undiminished as the Min-

^{7.} N.C. GEN. STAT. §§ 74-37, 38. 8. Letter from Henry B. Smith to Governor Robert Scott, January 15, 1970.
9. Winston-Salem Journal-Sentinel, April 4, 1970.

eral Resources Committee of the Department of Conservation and Development found it necessary to tell a group of concerned northwestern North Carolina citizens that it had no authority to seek a "holding action" against G.C. They would have to wait for the 1971 legislature to take action.¹⁰

By late April of 1970, G.C. announced that it had abandoned its plans—at least for the present—to mine gibbsite in North Carolina. Speculation about the major reason for the firm's withdrawal was rampant. Some thought perhaps the new extractive process had failed. Others blamed it on the firm's weak financial base. Still others felt that the din of public disapproval and the impending mining control legislation were the key factors to G.C.'s bowing out.

THE MINING ACT OF 1971

Regardless of the basis for the G.C. decision, the very real threat of large-scale strip-mining in the mountains of North Carolina had its effects. Shortly after the firm's decision to leave, the State Board of Conservation and Development adopted a resolution stating wholehearted support for the legislation to be introduced in the 1971 General Assembly to "clamp" state control over mining in North Carolina.¹¹

With the support of nearly all concerned, the 1971 General Assembly readily enacted the Mining Act of 1971.¹² This lengthy piece of legislation followed the basic guideline proposals set forth by the North Carolina Mining Council as prescribed by the Mining Registration Act of 1969. Its principal requirements were these: (1) All operators whose mining operations affect a land area greater than one acre shall be required to obtain a permit from the Department of Natural and Economic Resources (the successor to the Department of Conservation and Development). (2) The permit application must include an acceptable plan of land reclamation. (3) Permits may be denied because of designated environmental hazards. (4) The newly instituted Department of Natural and Economic Resources shall act as administrator for the act's provisions and may "promulgate such rules and regulations as may be reasonably necessary respecting the administration of the Act." (5) Upon approval of his application for a mining permit, an operator is required to file an acceptable performance bond in favor of North Carolina with the Department of Natural and Economic Resources. The amount of the bond is to be based upon the area of affected land to be reclaimed.

The act does not apply to activities of the North Carolina State Highway Commission, provided the Commission had adopted reclamation standards approved by the Mining Council, nor to mining on

10. Winston-Salem Journal-Sentinel, April 4, 1970. 11. Neus and Observer (Raleigh), May 3, 1970. 12. N.C. GEN. STAT. §§ 74-46 to -68. federal lands under a valid permit from the U. S. Forest Service or the U. S. Bureau of Land Management.

In a letter prepared for the mining operators of the state, Eugene Simmons, Director of the Department of C&D, specified that J. Craig McKenzie, the State Mining Engineer, and his two assistants from the Mining Division of the Office of Earth Resources within the Department are authorized to represent the department in administering the new act.¹³

Thus, in effect, the Mining Act of 1971 resembles on a statewide scale similar action taken by the Orange County commissioners four years earlier.

SUMMARY

Until 1967 little notice was paid to mining control in North Carolina except for interest in the Interstate Compact system from the Department of Conservation and Development.

The spring of 1967 and the prospects of surface mining by the Texas Gulf Sulfur Company in Orange County focused attention on the fact that North Carolina was without any statewide legislation to oversee mining operations and to guarantee land reclamation where mining practices had made this necessary.

Once the issue surfaced in Orange County, the social and political forces in the state began moving in the direction of state control for mining. The enabling legislation of the 1967 Interstate Mining Compact was a crucial step in the right direction. With the act, the State Mining Council was established to provide direction for developing the appropriate controls on the North Carolina mining industry.

The ensuing four years saw the Mining Council progress as a very effective policy advisory committee and play a major role in shaping the objectives for both the Mining Registration Act of 1969 and the Mining Act of 1971.

After the enactment of the Interstate Mining Compact and the Mining Registration Act of 1969, the final touch of incentive and awareness was added in the western reaches of the state by the Gibbsite Corporation. With the threat of strip-mining activity similar to that used in the coal industry, concerned state citizens were quick to sound the alarm for land-resource conservation and reclamation.

Thus the stage was set for the enactment of the Mining Act of 1971 to provide the legal basis for statewide enforcement of prescribed surface-mining procedures. With this act, the North Carolina General Assembly successfully concluded the effort to curb the potential mining hazards to the state's natural resources.

^{13.} Personal letter from Eugene Simmons, Director of Department of Natural and Economic Resources, to State Mining Operators, January 28, 1972.

ON STARTING SEX EDUCATION IN THE PUBLIC SCHOOLS

THREE YEARS AGO discussing human sexuality and its implications for public education in North Carolina would have stirred up a hornet's nest. I hope that this is not so today, because remaining silent is having consequences more disastrous than we like to think about.

People have given various reasons for supporting sex education programs in the schools in recent years. Some believe that education for sexuality is, in reality, education for personhood, of which sexual selfhood is an integral part. Closely related to this is the idea that such programs are useful in teaching our children what it is to be male or female in our society. For others, these programs serve the purpose of maximizing marital happiness. Still others feel that such programs can help reduce personal and social problems that might grow out of an improper use of the sex drive.

These are all valid reasons, to be built on in the future, but it seems to me that one of them—alleviating personal and social problems attendant to our sex drive—is particularly relevant in this place and time.

In 1970, 12,141 illegitimate children were born in North Carolina. At the current teacher-pupil ratio, that's enough to fill 430 classrooms—and it happens every year. In 1960 the illegitimacy rate was 9.3 per cent; in 1970 it was 12.6 per cent—an increase of 35 per cent in just 10 years. The illegitimacy rate might be much greater but for the fact that about 72 per cent of the 21,000 North Carolina school girls who become pregnant out of wedlock each year do marry before they give birth.

We currently have slightly more than one divorce or annulment for every four marriages each year in North Carolina. I think we would all like to see that divorce and annulment figure drop considerably. Can the schools do anything about this? Frankly, we don't know for sure that we can, but one thing is pretty certain, however: We can't unless we try.

A recent study replicated a 1963 study of some randomly selected high school boys in a Piedmont North Carolina school. The earlier study found that 32 per cent of the white boys were having sexual intercourse in 1963; in 1971 the figure had climbed to 47 per cent. This school had too few blacks in 1963 to use as a base for comparative statistics, but in 1971 87 per cent of the black males were copulating. No figures were gathered on the girls, and 1 won't guess about them. When we hear this kind of information, we shake our heads and say, "How terrible."—Which is not likely to affect the behavior of these students. Maybe nothing will. Certainly, however, whatever we have been doing isn't slowing down such activities.

Beyond these statistics about premarital sex and illegitimate births, we could also talk about abortions, both legal and illegal, which are increasing year after year, and about venereal diseases, which are invading just about every kind of home. But the point is clear that a misdirected sex drive is creating great problems both for society and for individuals.

The sex education controversy thus far has dealt with the wrong things; we have argued primarily about whether we should teach about sex or sex-related topics; yet, if any other human drive provided as much direction to human behavior as does the sex drive, we would consider our school administrators, counselors, and teachers derelict if they ignored it in their curriculum design. One of the nation's foremost school psychologists suggests that the maturation of the sex drive is, really, the justification for a psychology of adolescence.

But there is legitimate controversy about sex education. This one has to do with who will teach what; where will they teach it; and when and how. I think that at least part of the original controversy was started because a contingent of experts attempted to answer all of these questions for all schools in the same way. This is why several school boards throughout the country were forced to reverse some of their policies two or three years ago. They were trying to begin with what they considered to be an ideal program, but some portions of the community just refused to accept it. Or to put it differently, when school systems develop uniform programs for every-

one, then those parts that are objectionable to very small groups of people must be thrown out everywhere.

what should schools do, then, to respond responsibly to the needs of their community and pupils? First, a couple of things that school boards and administrators don't need to do: They don't need a state or federal grant in order to set up some novel or experimental program. Such funds seem to attract experts who appear more interested in getting some money and making a name for themselves than they are in developing programs in terms of teacher competence, pupil needs, and community tolerances. Neither do school boards and administrators need to have everything written down and agreed on beforehand. This procedure, in the area of sex education anyway, has a way of preventing anything from ever getting started.

Now some positive suggestions—though I can't promise that nobody will ever receive a telephone call (but then, if we want to insure ourselves against phone calls, we should continue to deal exclusively with areas of less importance to the kids and the community): First, I would suggest that the local school board go on record as having decided that the time has come for the schools to show a concern for the needs of the community and its children as they relate to human sexuality. At the same time, the board should quietly suggest to its executive officer that he tell his principals that they are at liberty to begin developing programs that will be helpful to their pupils. Principals will move cautiously on this because they, too, are aware that they are in a sensitive area.

A sex education program should be started in this manner for several reasons. The principal and teachers are in the best position to know what their pupils need and how to give it to them. They are also in the best position to discuss with parents the reasons why they are doing certain things in certain ways. They are in the best position to know what they are competent to do and when they need help from the outside. The principal is in the best position to decide which teachers to encourage to work in which curriculum areas. I would hope that we will soon reach the point where we will deal with sexuality in several curriculum areas. We all recognize the need for doing so in health and life science; it has an inevitable place in the literature and social studies curricula as well.

UNDOUBTEDLY, SOME AMONG US will say, "But our schools just aren't prepared to teach sex education." And they will be right. But when in the history of American education have the schools ever been prepared to undertake a task of any kind before the green light was turned on? Never.

Some will say, "Shouldn't we bring doctors and nurses in to handle most of this job?" This is quite

all right if it has to be done in order to get started. It is all right if the teachers work in the class-rooms with them so that they can gain the confidence that they need to carry on by themselves. I'm not opposed to doctors and nurses, but they cannot be in every classroom every time they are needed. And if teachers never discuss sexuality with students, what must the student conclude? That teachers are asexual?

Let me be very dogmatic and say that no professional group anywhere in this country has such training that it is prepared to begin teaching sex education to boys and girls in a competent way. This is not to criticize, but only to emphasize the point that those who work in schools today must approach a need and develop *new skills*. They must begin, and they must grow. It is exceedingly difficult to get the growth before the beginning.

How the growth will occur is best determined by the individual school system. But some schools will err by assuming that all they need to do is have some of their teachers read a pamphlet on how to teach about sexuality. They will do better if they first insist that the teachers know something about sex and sexuality. "How to teach it" best follows "What it is and how it works." Teachers can learn much of this through in-service workshops. A few schools of education offers courses and workshops in this area. The University at Chapel Hill offers one, and we are prepared to take it out to school systems. (Mr. George Shackleford, Health Educator in the State Department of Public Information, is most interested in this area, and thus far I have been able to go to every place I have been invited to.)

Many school board members and school personnel are reluctant to talk about sex education programs because they don't know what they want to do about teaching sex-related values. Kids don't want to know about values first; they want to know about sex first. But very soon after they learn about sex and sexual behaviors, they do want to know what older people think about this and that behavior, and why. If we don't tell them, they draw their own conclusions from whatever information they have—correct or incorrect. 1, for one, am not willing for them to have to rely on what they see in the movies, read about in the slick magazines, and hear from their friends. And have no fear about the school's stealing the sex education function of the home and church. We can't steal from them a function that they do not now have. Homes and churches will start talking with their children about sex when we start at school. In fact, this is the best way that I know to get them to do so-which is, in the final analysis, really what we would most like to see happen.

JUST A WORD ABOUT WHERE sex education should be taught in the schools. The experts suggest that it should be a K-12 program; I'm not opposed to that, except that I don't know of any school system

in North Carolina that can now do this much. Sex education has to begin at the grade levels where the community sees the greatest need. And this is determined, in part, by what objective is paramount within the community. In some communities it may begin in the lower grades because the community sees the greatest need as that of helping children to develop a healthy respect for their own bodies, an appreciation for their family, etc. This might not be necessary among children who are fortunate enough to have been born into a family where they were wanted by a set of parents who loved each other very dearly.

The program may best be initiated in some schools at about the fifth grade because most of the girls will soon begin menstruating (a few already have) and need to understand what is about to happen to them. (Yes, I would prefer that their mothers explained all of this to them, too, but about 25 per cent of them don't—and a lot more than that don't know how to do it very well.) A few of these girls are also experiencing sexual intercourse, and a few boys too. Both boys and girls will soon experience body changes associated with the development of secondary sex

characteristics. Why aren't they entitled to correct information here?

Some may prefer to initiate sex education programs at the high school level. These people will soon see the need for dropping a part of the program into lower grades—but that's all right too.

Or special courses can be offered at the juniorsenior levels. They miss those who most needed the program, of course—the drop-outs. But this is one approach that can be used if we are convinced that we have only one teacher who can teach kids about their sexuality.

The human sex drive is such that somewhere, somehow, our children will acquire information and attitudes pertaining to it. Most of them would like some help from their schools. A few schools have made a beginning. I'd like to invite the others to do so.

Note: The Division of Health, Safety, and Physical Education, State Department of Public Instruction, Raleigh, N. C., will be happy to send you a copy of their prepared bibliography entitled Materials: Family Life And Sex Education.

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LOCAL GOVERNMENT DEBT ADMINISTRATION IN NORTH CAROLINA

by Harlan E. Boyles

Introduction

Public financing reached an all-time high in 1971. The total volume of more than \$24 billion topped the 1970 record by some \$6.5 billion. Interest costs, according to the Bond Buyer's twenty-bond index, fluctuated widely between a high of 6.25 per cent and a low of 5 per cent.

While the closing months saw a trend favorable to state and local governments, the year 1971 brought further discussions on the various ways and means of effectively addressing the mounting costs of borrowing money. Several alternatives have been advanced for combating the high cost of borrowing, but the principal ones are a federal subsidy to municipal borrowers,1 the municipal bond insurance plan,2 and the state bond bank.3 The major complaint against the federal subsidy program is the surrender of the borrower's tax-exempt privilege. The difficulty of the bond insurance plan relates largely to the cost of the insurance and the question of broad investor acceptance. The state bond bank, on the other hand, is generally expected to gain acceptance as states pass enabling legislation.

This last alternative, the state bond bank, brings us to the state's role in local government debt administration. A number of states review proposed bond issues of local governments and offer technical assistance in marketing bonds, but North Carolina is said to be unique in that the state actually conducts the sale. Because of this unique role, I want to share with you our experience in North Carolina and point out some general principles that may interest officials in other states, even though these states have different legal requirements.

A Little History

North Carolina state government has been very active in local government debt administration for more than forty years, and we think that it has filled its role very successfully.

The Local Government Commission, the state assistance agency that deals with local government finance, was created in 1931. In many respects the Commission grew out of two nationwide trends that had an impact on North Carolina. The first was the general movement during the early 1920s toward improved governments on all levels, the landmark being the federal Budget and Accounting Act of 1921, which established the Burcau of the Budget and made the President, in effect, the business manager of the United States. Despite a clear pattern of fiscal reform in North Carolina before the Local Government Commission was established, by 1931 the collapse of the national economy had led governments into default and bankruptcy, just as it did many individuals.

In the decade after World War I, heavy demands for such improvements as new streets and highways, school buildings, water and sewer systems, and many other lacilities brought about the need for bond financing. It was a time of great optimism and no state control. So it is not surprising that during the 1920s some of the bonds were issued for unwise and uneconomical purposes without proper consideration of the unit's ability to repay. Many term bonds were issued, payable as much as forty to fifty years from

^{1.} S 3215, introduced by Senator William Proxmire, would provide state and local governments the option of issuing taxable bonds, in which event the federal government would automatically pay directly to the holders of such bonds a fixed rate at a substantial percentage of the interest payable on every interest payment date.

2. A noncancellable insurance contract, specifically designed by insurers of municipal bonds, guaranteeing the payment when due of the principal and interest on the insured bonds. The insurance extends for the entire life of the issue of insured bonds.

3. This would be accomplished by creating a new state agency that would sell state bonds in the national market and invest the proceeds thereof in local government bond issues.

Most federal proposals in this area have been directed toward an urhan type of federal agency, which would finance its operations with bond issues the interest on which would be taxable. The states that have considered a move in this direction lean toward the state bond bank idea—separate state-controlled and administered bond banks formed specifically to purchase small local government bond issues on favorable terms, financed with tax-exempt bonds.

their date and without maintaining sinking funds for their retirement. The truth is that the scheduling of maturities had not been realistic, and in many instances problems would have developed even if there had been no decline in the tax base as the state and the nation moved into the depression.

In 1931, the North Carolina Association of County Commissioners, the North Carolina Tax Commission, the Brookings Institution (through a report submitted to the Governor), and the County Government Advisory Commission proposed and requested changes to strengthen local government debt administration in North Carolina, and Governor O. Max Gardner asked for state supervision of debt-incurring powers in his biennial message to the 1931 General Assembly.

The first major act of the 1931 General Assembly was the passage of the Local Government Act, which indicates the severity of the economic crisis. This act established the Local Government Commission and gave it broad powers to assist local government finance generally and debt management particularly. The act remains substantially unchanged today.

How the Commission Works

The history that we have just traced is particularly important as states look at our operations to see how they might benefit from them. We are frequently asked how we could develop a strong state assistance program without interfering with substantive decisions at the local level. First, we began in a time when anything that helped would have been acceptable to the local governments and, furthermore, this help was actively sought by the local officials.

Within our powers, we were able in about 10 years to clear up the default situations throughout most of the state, which at its peak included 62 counties, 152 towns, and 200 districts in default. By 1942 only six small towns were still in default. Today, we are proud that we have no local units in default.

Assistance to local units in clearing up defaults and refinancing these debts represented most of the work during the early years, but the success of our efforts earned the respect of local officials and allowed us to move smoothly in regard to the other responsibilities established for us in 1931.

The Local Government Commission is made up of nine members, four ex officio. The State Treasurer serves as chairman and selects the Secretary and the staff assistants. The Secretary supervises the staff, which does most of the actual work of the Commission. The Commission relies on the staff's professional expertise, and the Secretary's recommendations are usually accepted.

It is important to note that our primary role today is counseling with local government officials in matters of local government finance. This was a role assigned originally to the County Government AdThe author is Secretary of the Local Government Commission. This article is adapted from an address he made before the Municipal Finance Officers Association meeting in Denver last month.

visory Commission in 1927 and carried over to the present Local Government Commission in 1931.

By emphasizing this counseling role rather than mere enforcement of the legal and statutory requirements, we are able to work with local officials in developing their total fiscal program rather than relating to them only when a specific bond issue is involved. Let there be no doubt that we have the necessary statutory power to enforce our position in North Carolina. But the point is that we feel that the statutory requirements simply represent good debt management practices; because the local official understands this, he elects to follow these practices without any mandate from us. The official who cooperates with the Commission can expect that the best interests of his county or town will be served. We have demonstrated this time and again over the forty years. Our reputation is well established among the local units.

LET ME DESCRIBE FIRST the Commission itself and then the procedure used in North Carolina in issuing bonds. I will refer primarily to general obligation bonds, since these are by far the largest percentage of bonds issued in North Carolina, although revenue bonds are permitted by law.

The Commission, which functions as a division of the Department of the State Treasurer, supervises all aspects of the debt-issuance process. The procedures are carefully prescribed by law, and both the letter and the spirit of the law are followed, but again in the context of sound fiscal counseling.

Before any local unit may issue bonds or notes, it must file an application with the Commission requesting approval of the proposed issue. In actual practice the decision for approval is made before an application is formally submitted. A local official will contact the Commission office, provide information concerning his proposed financing, and then meet informally with the Secretary or his designated assistant to discuss the feasibility of the proposed bonds. If the Commission's staff has doubts about the marketability of the bonds, it will suggest possible changes designed to strengthen the proposal. If these changes can be made, then the issue will likely be approved by the Commission. If the issue still seems infeasible in the Commission's view, then the local unit will usually discontinue plans for issuing the proposed bonds.

The statute has specific provisions describing what the Commission must consider in reaching its decision. In general, the Commission looks into the necessity and expediency of the bonds or notes as proposed, the adequacy of amount, and the ability of the issuing unit to make repayment. It must consider:

- 1. The adequacy of the amount of the proposed issue to accomplish the purpose for which the obligations are to be issued.
- Whether the amount of the proposed issue is excessive.

In addition, the following items may be considered:

- 1. The necessity for any improvement to be made from the proceeds of any such bonds or notes.
- 2. The amount of indebtedness of the unit then outstanding.
- 3. Whether debt service funds for existing debt have been adequately maintained.
- 4. The percentage of collections of taxes for the preceding fiscal year.
- 5. Whether the law has been complied with in the matter of budgetary control.
- 6. Whether or not the unit is in default in paying any of its indebtedness or interest thereon.
- 7. The assessed value of taxable property.
- 8. The existing tax rates.
- 9. The increase in value of taxable property.
- 10. The reasonable ability of the unit to sustain the additional tax levy, if any, necessary to pay the interest and principle of the proposed obligations as they become payable.
- 11. Any other matters that the Commission may believe to have a bearing on the question presented. It has specific authority to inquire into such matters.

Again, in practice we seldom find that the statute places any undue restrictions upon the borrower; consequently the primary consideration is whether the bonds can be marketed at a reasonable rate of interest. Although the market is a fairly reasonable judge of the local units' ability to manage new bond issues, the extensive experience of the Commission's staff in marketing bonds can be used early in the process to save the local unit considerable time and expense by declining to authorize bonds that are not considered marketable at interest rates the unit can reasonably afford to pay. In other states, the decision of the market may come as a shock when no bids are received or the bids received require prohibitive rates of interest.

If the local unit chooses to proceed with a formal presentation to the Commission and is turned down there, then it may go to its voters and the decision of the Commission may be overturned by a majority vote. Obviously, this procedure would make it highly unlikely that the bonds could be marketed successfully. So far as I know, this procedure has never been used.

After the Commission's formal approval of the proposed issue, the issue ordinarily must go to a referendum; with a few exceptions, major proposals require voter approval.

WHILE WE ARE ON THE SUBJECT of limitations, I will mention that we do have statutory debt limitations in North Carolina, expressed as a percentage of the unit's property values, but they have not hindered the incurrence of debt as this type of legislation has in some states. An excellent property assessment program has helped to keep the assessed valuations realistic enough to place the limitation at a level appropriate for good debt management. The Commission's acceptable level would probably be less than the statutory maximum even if the limits did not exist.

That local units accept this statement is demonstrated by the fact that there are no attempts to evade the limitation or change it, such as frequently happens in other states. Even the practice, relatively common in some states, of evading the limitation with the use of revenue bonds is unusual in North Carolina.

ONCE LOCAL VOTER APPROVAL has been obtained, the Commission returns to a major role in the process—marketing the bonds. It conducts the entire sale, from the design of the issue and the notice of sale through the collection of proceeds. The Commission prepares the notice of sale and the detailed prospectus. The notice of sale is published as required by statute; it is also mailed together with the prospectus to various bond buyers throughout the country. The sale takes place in the Commission office in Raleigh. The bids are opened publicly, and the sale is awarded to the bidder whose interest rates provide the lowest cost to the issuing unit.

The only major activity in this process that has not been provided by the Commission is the legal opinion of bond counsel. As is customary throughout the country, this task is performed by attorney specialists; in North Carolina, we rely only on the opinion of nationally recognized municipal bond counsel firms.

This sales process is a unique aspect of North Carolina's state assistance to focal debt management. As I have mentioned, we are said to be the only state that has mandatory sales by a state agency.

This procedure has many advantages. First, our staff knows and understands the market and how it responds and reacts to North Carolina issues better than any one of our more than 600 local units could possibly understand, working independently. We know insofar as possible the best times to self to obtain the most favorable interest rates.

Investment bankers throughout the nation have come to know the Commission by its reputation, and any of its issues are known to be backed up by the considerable planning that has already been described. These bankers have indicated that this has had an excellent effect upon the prices quoted for North Carolina bonds in the national markets.

IT IS DIFFICULT to pinpoint the specific indicators that make up the credit standing of a particular municipality. There are obviously some clear-cut considerations like past performance, fiscal capability, tax base, and so forth, but other nebulous factors are not so easy to pin down. North Carolina's central marketing service is one of those that through the years has developed what might be called "confidence" among the buyers. North Carolina's municipal bonds, quality for quality, have consistently sold at interest rates lower than the index of the national market. The evidence is fairly clear that the Commission has helped to improve municipal debt management in North Carolina.

Among the advantages cited for the North Carolina system are:

- Close supervision of local funding plans, which adds to the attractiveness of the securities offered.
- Provision of adequate statistical information concerning the finances of each government to prospective bidders.
- 3. Technical assistance in planning the bond issues—especially for the smaller local governments.
- 4. Regularity of issues emanating from the Commission—thereby encouraging interest by investment bankers.
- 5. Convenience of bidding at a single accessible city (Raleigh).
- 6. Groupings of issues to provide a package of bonds being offered that is usually sufficient to attract the attention of syndicates that would otherwise forego an interest in bidding.

Another Commission task that adds to this picture is the post-sale activity to insure timely payment of principal and interest as they come due. To do this, the Commission must keep up to date on the fiscal condition of the counties and municipalities; this close watch helps identify any danger signals in time for the Commission to make recommendations.

The Commission keeps a complete record of all issues of bonds and notes. Notices of principal and

interest payments coming due in the coming fiscal year are mailed to the unit's officials before the time for budget adoption. Similar notices are also forwarded before each date of payment.

The Commission has a number of other responsibilities provided by statute, including accounting systems and practices; independent audit programs, and the establishment of investment policies and procedures. All of these responsibilities ultimately add to the security of North Carolina bonds.

While I speak from the perspective of state government. I do believe the Commission has achieved this relative success without undue infringement on local decision-making. The approach the Commission takes is to advise and counsel. With the strong authority of the statute behind us, we could be more authoritarian, but have not needed to be. The major decision, to initiate an issue for a specific purpose, is still in the hands of the local government. The non-use of the appeal procedure available in North Carolina's statutes is evidence of this.

THIS HAS BEEN A BRIEF PICTURE of North Carolina's program in local debt management. To us it is clear that the Commission's supervision serves to assure investors that correct procedures have been followed and that the fiscal data presented in the offering circular is based upon reliable sources. The local units also benefit through lower interest costs that result from the underwriters' knowledge of the Commission's standards and the uniformity of the offering procedures. Another state may or may not find it wise to adopt our system; that is why I have emphasized our historical pattern to show why certain elements were found acceptable in North Carolina. Still, North Carolina has found it extremely helpful to have a state agency to keep track of the finances of the municipalities and see that they do not get into undue difficulty with their problems of debt administration. Certainly some aspects of our system are transferable, and other states may be interested in exploring them.

FRANKNESS

in the doctor-patient relationship

Anne M. Dellinger and David G. Warren

How full an explanation of diagnosis and treatment do most patients receive from their physicians? Would the doctor-patient relationship benefit from greater disclosure? How can the law contribute to improving the doctor-patient relationship? This article explores the concept of "informed consent" to medical treatment and provides some answers to these questions.

Informed Consent and the Question of Disclosure

Increasingly a factor in medical malpractice lawsuits is the after-the-fact conclusion that the physician did not communicate enough to the patient. While most of these suits also involve substandard and negligent treatment by the physician, they highlight the sensitive question of disclosure of information to the patient. The law requires that any medical care or treatment must be authorized by the patient or his representative. This principle is based on Judge Cardozo's well-known statement that "Every human being of adult years and sound mind has a right to determine what shall be done with his own body."1 To be able to make that determination, the patient must have full and accurate information communicated to him in understandable terms by his physician. When the question of disclosure arises in the unfortunate context of a lawsuit by a patient (or his survivors) who has suffered some unexpected or unsatisfactory result, the principle of informed consent will be applied, sometimes to the discomfort of the defendant physician.

1. Schloendorff 1. Society of N.Y. Hospital, 211 N.Y. 125, 126, 105 N.E. 92, 93 (1914).

While he agrees with the Cardozo principle and realizes the threat of lawsuits, in his practice the physician seems to handle the question differently. There is little empirical information on what the average doctor tells the average patient about diagnosis and treatment possibilities, but some evidence indicates that many physicians are disclosing much less than they should. One well-known surgery text advises that the amount of disclosure should be carefully limited, depending on each patient's situation;² and the few reported studies of actual practice support the assumption that doctors follow that advice. For example, in one study of fifty patients examined at a clinic, a third were told nothing, not even that tests were to be performed; half were told one or more basic, isolated facts, such as "you will be given a chest x-ray"; and only a sixth were given a reasonably complete explanation of what procedures were planned, what the tests might show, and what the results might mean.3 Similarly, according to one survey a group of physicians felt strongly that a patient's medical records are not the patient's concern and that he should have no access to them either during or after treat-

It might be expected that physicians would be reluctant to reveal a grave diagnosis, and this expectation is fulfilled by several studies of doctors who treat cancer patients. Reporting on the disclosure practices of 442 Philadelphia doctors, a 1953 survey

^{2.} Nemiah, Psychological Aspects of Surgical Practice, in SURGERY: A CONCISE GUIDE TO CLINICAL PRACTICE 26 (2d ed., G Naschi and G. Zuidema, eds., 1965).

3. Jaco (ed.), PATIENTS, PHYSICIANS AND ILLNESS 222, 226-227, cited in Note, Restructuring Informed Consent: Legal Therapy for the Doctor-Patient Relationship, 79 YALE L.J. 1533, 1546, footnote 37 (1970).

4. Hagman, The Medical Patient's Right to Know: Report on a Medical-Legal-Ethical Empirical Study, 17 UCLA L. Rev. 810, footnote 194 (1970) (hereafter, Hagman).

revealed that only 3 per cent of the physicians "always tell" the patient when the diagnosis is cancer, 28 per cent "usually tell," 57 per cent "usually do not tell," and 12 per cent "never tell." The nondisclosure rate from a more recent study, which appears to have been particularly sensitive and probing, is even more striking. Of more than 200 physicians questioned in this study by written survey and personal interview, approximately 88 per cent replied that they do not reveal a diagnosis of cancer to the patient, even in the face of direct and repeated inquiry.6 If the rate of nondisclosure is so high for all diagnoses of cancer (for which in some cases there is hope of a cure or delay), it makes more credible one commentator's blunt assertion about what is told the dying: "Most doctors do not tell the truth under such circumstances."7

The Reasons for Nondisclosure

The reasons behind a doctor's choice whether to disclose to his patients must remain largely a matter of speculation, but drawing from all available sources (common sense, the views of commentators, and the unfortunately inadequate information from doctors themselves), a variety of possible motives emerges some flattering to the medical profession, others neutral, and still others certain to bring heated denials from many physicians. The simplest explanation is that given by the doctors interviewed in the Oken study.8 In this group, nearly 90 per cent of whom do not disclose a diagnosis of cancer, every doctor stated that his treatment goal is to keep the patient's hope alive, and to do so he "communicates the possibility, even the likelihood, of recovery." The majority believe both that a cancer diagnosis will be viewed as a death sentence by the patient and that a death sentence necessarily deprives the patient of hope. The doctors dismissed questioning from the patient as evidence of the desperate desire for reassurance rather than a real wish to know the facts. Another group of physicians surveyed expressed similar feelings that patients either do not wish to know the truth about their illnesses or, alternatively, know without being told,9 and such opinions from the physicians apparently represent deeply held convictions. One group of doctors said they altered their customary practice only when a patient refused treatment or needed to make financial arrangements.10 Forty per cent of another group admitted they would not or might not be led to change their opinion by research, while 10 per cent felt that research should not even be attempted in this area.¹¹ Interestingly, most of the participating doctors in the last-mentioned study claimed that their policy of not disclosing was a result of experience, but the investigator disagreed. Citing vague responses to direct questions on the alleged experience, unwillingness to hear other views, and the emotion with which the doctors spoke, he concluded that "These are hardly cool, scientific judgments. It would appear that personal conviction is the decisive factor."12

Other reasons for nondisclosure frequently alluded to in medical literature are (1) the possibility that a discussion of the unavoidable risks will cause a patient to decline necessary treatment,13 (2) the need to conserve physicians' time, 14 (3) a feeling that the patient is usually incapable of understanding an explanation of medical procedures and their risks.15 As a fourth possible factor, two kinds of physician attitudes (which threaten the concept of doctor-ashelper) may also play a part in some doctors' decisions not to share their information with the patient. First, physicians in the United States enjoy unparalleled prestige as the holders of the powers of medical cures, and it would be strange indeed if a few members of the profession did not enjoy this image of omnipotence. Full disclosure of diagnosis and a frank discussion of alternative treatment possibilities and risks may be unacceptable to some doctors because they imply an admission that the doctor is neither all-knowing nor all-powerful. As one commentator states the problem: "The priestly role, a relic of primitive society's amalgam of the rites of healing and of propitiating the angry gods, is something that present-day physicians try hard and not always successfully, to shed. Yet they are at the same time all too often reluctant to take off their professional mask with its connotation of superiority and witch-doctor potency."16 In defense of doctors afflicted with the doctor-as-magician syndrome, it must be noted that many patients prefer the doctor in this role, and that the role itself is sometimes thought to produce therapeutic effects.¹⁷ The other kind of physician attitude that may be a reason for nondisclosure is one inherently incapable of proof yet at least plausible in some settings. Two studies of the dving have concluded that often those who surround the patient

^{5.} What Philadelphia Physicians Tell Patients with Cancer. 155 J.A.M.A. 901 (1953). 6. Oken, What to Tell Cancer Patients, 175 J.A.M.A. 1120 (1961)

⁽hereafter, Oken).
7. Hagman, at 779.
8. Oken, supra note 6.
9. Hagman, at 779.
10. See footnote 5, supra.

^{11.} Oken, at 1125.

¹³ Id. 13. Waltz & Scheuneman, Informed Consens to Therapy, 64 NORTH-WESTERN U.L. REV. 625, 657, footnote 35, 1969. 14. S. GREENBERG, THE QUALITY OF MERCY 211, 1971. hereafter.

^{14.} S Greenberg. The QUALITY OF MERCY 211 1971: hereafter. Greenberg)
15. J. Fletcher, "Informed Consent: The Nature of the Art," 12 (unpublished speech to the Biological Research Issues Task Group, Raleigh. North Carolina, Sept. 22, 1969; in the éles of David G. Warren, Institute of Government, Chapel Hill, N. C.).
16. Greenberg, at 215.
17. 18. Greenberg (at 225) quotes an unnamed doctor: "... nearly as often as science or art, it is faith that makes medicine work."

—his relatives, friends, and medical personnel—force him to participate in a charade that consists of ignoring his grave illness and death, and they do this not for his sake but for their own.18 If this is true, then the physician who decides not to disclose a serious diagnosis or risk may be motivated more by the desire to spare himself mental suffering than to spare the patient. The Oken study lends support to this theory by its assertion that the majority of the doctors interviewed were so frightened and pessimistic about cancer that their failure to reveal the diagnosis was actually an attempt to deny its reality.19

The Advantages of Disclosure

The primary advantage of full disclosure would be the resolution of the current contradictory views of the doctor-patient relationship. The ambivalence lies in the fact that the law acknowledges the patient as a competent individual undertaking, or not undertaking, a contract for services with the physician; but medical practice, in concealing diagnosis, risks, and alternative treatment possibilities, seems to assert the incompetency of the patient to judge his own interests. As problematic as disclosure may be for a doctor, it is clear that the law suggests that the conflict be resolved in favor of the contract theory of medical services.

Needless to say, the fear that a patient may refuse medically indicated treatment can never be a sufficient excuse for failure to disclose. Although under any conceivable standard the great majority of patients will continue to follow their doctor's advice, "the very foundation of the doctrine [of informed consent] is every man's right to forego treatment or even cure if it entails what for him are intolerable consequences or risks, however warped or perverted his sense of values may be in the eyes of the medical profession, or even of the community, so long as any distortion falls short of what the law regards as incompetency. . . ."20 If occasionally the legitimate interests of doctor and patient differ, then it is even more critical to the patient's welfare that the policy be disclosure rather than nondisclosure.

In addition to the patient's right of choice, based on grounds of individual liberty, there is a perhaps more attractive argument to be made for disclosure the therapeutic effect on the patient. In the Oken study the minority who generally disclosed felt that knowledge had a value in helping the patient to conquer his fear;21 and Dr. Oken himself, while admitting personal uncertainty, points out that for the patient "[a]s in any dreaded situation, emotion fills a vacuum with rumor, pseudofact, and projected fears. It is noteworthy that the question is posed: 'can a patient stand being told,' whereas 'can the patient stand not being told' is almost never heard, although it is equally valid from the scientific viewpoint."22 Some researchers, as mentioned previously, are ready to assert that even the dying patient suffers from concealment-that while he is not deceived as to the gravity of his situation, the lack of frankness increases his painful sense of isolation. In place of medical hypocrisy, these commentators recommend that the patient be told the truth and then be offered the warm support that will allow him to discuss his fear without the apprehension of losing companionship (however difficult it may be for doctor and relatives to listen).²³ There is some corroboration of this view from patients and prospective patients. In three surveys of cancer patients, between 82 and 89 per cent said they were glad to have been informed of the truth about their illness,24 and similar results were obtained in a survey of patients about to undergo angiograms.²⁵ In the latter experiment patients who had been referred for the angiogram (a diagnostic procedure that traces blood vessels for x-rays and has a 1 in 50 serious complication risk) were given a consent form accompanied by an extremely frank statement of risk. Most (228 of the 232 patients) elected to have the test, and between 80 and 89 per cent said they appreciated the information.

A particularly instructive finding is that in the Oken study 73 of 122 doctors who did not disclose the cancer diagnosis stated that they themselves would wish to be told the truth. The usual reasons given were "I am one of those who can take it," or "I have responsibilities."26

Finally, it is at least possible that benefits to patients might result when a duty of disclosure forces the physician to think through and verbalize the risks of his recommended treatment and the alternatives. In that process the doctor reminds himself of such hazards as medically induced illness and other risks of overtreatment that even excellent doctors may have a natural tendency to discount.

The physician too may derive positive benefits from fuller disclosure. From the doctor who stated that he always told the truth to a family member

^{18.} Hackett & Weisman, "Reactions to the Imminence of Death," in THE THREAT OF IMPENDING DISASTER 303-4 (G. Grosser, ed., 1964); E. KUBLER ROSS, ON DEATH AND DYING (1969).

O. F. HARPER & F. JAMES, LAW OF TORTS, § 17 (1968 Supp.,

^{21.} Oken, at 1124.
22. Oken, at 1126.
23. Hackett & Weisman, supra note 18, at 304.
24. Cited in Oken, at 1120. However, Dr. Oken points out that a rationalizing effect cannot be dismissed here, since these patients desperately need to believe in their doctors' wisdom at this point.
25. Alfidi, Informed Consent—A Study of Patient Reaction, 216 need to believe in their 25. Alfidi, Informe J.A.M.A. 1325 (1971). 26. Oken, at 1125.

because "I just can't carry the load alone"27 to the observer who sees the doctor as a figure unwillingly "placed in a magic circle by helpless and anxious patients,"28 there is wide recognition of the physician's considerable mental burdens. Those burdens might be eased by sharing knowledge and decision responsibility with the patient. A second dividend for physicians might be some decrease in the currently rising amount of malpractice litigation. At least one legal source predicts that fewer suits would follow the imposition of a stricter duty to warn, on the reasonable assumptions that increased communications would mean friendlier relationships between doctor and patient, and a forewarned patient would be less likely to ascribe bad results to the doctor's negligence.29 Psychologists studying reactions to surgery and patients' postoperative recovery rates have confirmed that the unprepared surgical patient seems to feel more threatened and tends to transfer blame for the threat to the doctor who said nothing or gave false assurances.30

What Should Be Disclosed?

Assuming that the arguments for fuller disclosure have some merit, the next inquiry should be how to change current methods of securing consent to treatment so that they will insure genuine participation in decision-making for the patient. What information should a patient normally be given? One thoughtful article on the subject recommends that the physician discuss with the patient the most basic facts in each of the following categories: the diagnosis, the doctor's preferred treatment, his experience with the treatment, the principal hazards, the amount and kind of anticipated pain, the probable benefits of the treatment, alternatives to the preferred treatment, and the prognosis.³¹ The patient consultation process

27. Oken, at 1123.
28. GREENBERG, at 215.
29. Note, 75 HARV. L. REV. 1445, 1449 (1962).
30. 1. JANIS, PSYCHOLOGICAL STRESS 358, 368 (1958), cited in 79 YALE L.J. 1570, footnote 108 (1970).
31. 79 YALE L.J. 1533, 1561 (1970).

need not be as time-consuming as physicians might fear. The average patient will already know the very common risks and those within his own prior experience, and it has been suggested that nurses and paramedicals could be prepared to handle some consultations.32

Informed Consent as a Management Tool

The hospital consent form (now routinely signed by all patients) could serve as a valuable check on the patient's understanding of proposed medical procedures, though most forms now used do not do so. The consent form could actually be helpful to the hospital in preparing the patient for surgery, rather than simply the lawyer's hindrance it is often considered to be. Involving the patient in his own process of care and treatment might be both therapeutic and humanistic and at the same time satisfy, more than just minimally, the legal requirements.

The common medical notion that "a consent form is not worth the paper it is written on" is not conducive to developing the useful functions a consent form can be made to serve. But since the form is generally held in low regard as mere administrative red tape, enhancement of its role might be welcomed. If the form can become a means of improving the doctor-patient relationship and assuaging the patient's fear and the physician's guilt, obtaining written consent could even become an effective therapeutic procedure. The two-way process of conscientiously informing the patient about the treatment and of intelligently authorizing the physician to proceed with it is promoted by both parties' taking the consent form seriously. Therefore, the form should be carefully designed, in both content and phrasing, to function as the essential instrument in that process. Perhaps, then, frankness in the physician-patient relationship is the best thing the doctor can order and the right thing for the patient to demand,

32. Id. at 1560-61.

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