"If we, young and old, can agree on those basic values that make human life worth living, then perhaps we can pool our efforts . . . to redeem the times. It still won't be easy, but it can be done."
About the Issue

Webster's dictionary defines the word insight as "The power or act of seeing into a situation." *Insight: Notre Dame* was conceived to do just that—to provide understanding where ignorance or misunderstanding may have once existed. *Insight* is interested not only in reporting the facts, but also in providing the kind of perspective in which the facts take on a meaning often hidden behind the headlines of spot news stories.

In this issue of *Insight*, we have tackled two issues of great concern to the University community—student activism and coeducation. Managing editor Ron Parent writes about student activism while editor Dick Conklin reports on coeducation. The student activism article is timely because many educators fear that the 1970-71 school year will be the most violent in the history of American education. Some educators predict that many schools may eventually be forced to close their doors. What was the significance of the reaction at Notre Dame to the Cambodian incursion and what about the future of campus activism?

Conklin traces the development of coordinate coeducation with nearby Saint Mary's College, a movement which has received growing impetus recently and quite likely will come to a head in a consultant's report early next year.

The issue also features an unusual photographic look at the role of insects. The article is an effort to combine copy and photographs to provide insight into an area of major concern to Notre Dame researchers. The delightful photographs are the work of Fred Nijhout '70, a biology major while at Notre Dame.

And finally, the issue spotlights one of Notre Dame's senior faculty members and presents the usual potpourri of campus news. We hope the issue will hold your attention as you join us in attempting to understand our exciting but complex and often baffling University.

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SUMMER, 1970
Vol. V, No. 1

INSIGHT: Notre Dame is published quarterly by the University of Notre Dame. Second class postage paid at Notre Dame, Ind. 46556

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Is the Notre Dame student a fist-waving radical or does his activism take the form of the panty raid?

The truth is that the panty raid tradition still lingers on at the University, and until Cambodia many students seemed to prefer that kind of activity to confrontation politics. For example, a few days before the Cambodian incursion, hundreds of Notre Dame students stormed Saint Mary's College screaming, "Here come the Irish."

However, an about-face occurred only a few days later when President Nixon announced the extension of the Vietnam war into Cambodia. The scene was analogous and the cast included many of the panty raiders. The difference was that for the first time many students were angry and ready to tackle what they considered a disastrous expansion of an increasingly unpopular war. The results were a variety of nonviolent activity which included a student strike, informal "communiversity" discussions, fasts, liturgical ceremonies, economic boycotts of luxury youth-market items, canvassing for signatures on antiwar petitions and letter writing to hometown editors, politicians and bishops. The Academic Council of the University suspended classes for two days (one a holy day) and options were adopted which allowed professors increased discretionary power in determining grades of students involved in non-classroom activities.

The party raid and the post-Cambodia campus activity reveal two sides of the Notre Dame man. There are many others. In fact, the Notre Dame student, like his counterpart at other universities, is a complex individual who often defies labels. To understand his changing moods, one must constantly review what he says, thinks and does. He can't be pigeon-holed into neat little categories. He just doesn't fit. "For every assertion made about American youth," noted a recent article in The Center Magazine, "there exists, it seems, an exact denial."

While it may appear to the casual observer that the Notre Dame student has made a sudden and dramatic change from panty raider to campus activist, it is closer to the truth to say that there has been a slow but steady move toward serious student involvement in campus, community, national and international issues.

Mike Hendryx '70 puts it this way: "When I came here four years ago, most freshmen were not involved in anything other than football and studies. Today, freshmen are involved in everything. They are thinking individuals who question everything about the University and American society."

Part of the reason for the increased activism of Notre Dame students can be explained by the fact that young persons today are demanding more of a voice in determining events that affect their lives. Joe Mulligan '59, an assistant director of admissions at Notre Dame, believes that Notre Dame students will increasingly question past traditions that seem to them to be meaningless today. This predilection for challenging the status quo has led some observers to castigate students as "fixed at the temper tantrum stage" while others sympathetically explain that they are "the first generation born in a new country."

A survey made by the American Council on Education of 169,190 members of the nation's 1969 freshman class is instructive. The survey, which involved students at 270 institutions, revealed an increasing spirit of activism and a deep concern about pressing social issues. The report also indicated that substantial majorities of our country's class of 1973 favored increased efforts to control environmental pollution, prevent crime, eliminate poverty, protect
... they sense that law and order are not possible in a world, or in a nation, or in a university in which there is not a deep concern for justice and equality ...

consumers and provide compensatory education for disadvantaged students.

But it was in the matter of their educational goal that the freshmen showed almost unanimity of opinion. Nearly all respondents considered it essential that their education help them develop a philosophy of life, a value system. Also, nearly 90 per cent of all 1969 freshmen from large state universities to small Catholic institutions agreed that students should have a major role in designing curriculum, and only 21 per cent of the freshmen at Catholic universities believed the university has the right to regulate off-campus behavior.

Mulligan points out that "today's high school student was brought up to believe in the great American dream. As he reached senior high school, and particularly the first years of college, he became increasingly aware of some of the injustices of our society. His anger is often directed at the institution he attends."

Rev. Theodore M. Hesburgh, C.S.C., president of Notre Dame and chairman of the U.S. Civil Rights Commission, believes that students, in many cases, have a right to be angry. He says: "Here at home we are creating, not what all of them recited in grade school each morning, 'One nation, indivisible, with liberty and justice for all,' but two nations—one black or brown and one white; one educated, one uneducated; one poor, one affluent; one with hope, another hopeless.

"Thank God they are concerned. . . . They sense that law and order are not possible in a world, or in a nation, or in a university in which there is not a deep concern for justice and equality and the development of a better world."

But despite the national move toward activism, Mulligan isn't worried about the Notre Dame student "taking over the campus." In fact, he thinks the Notre Dame student is more like his predecessor than many realize. "Sure he may look different," Mulligan says. "He may have longer hair, he may not dress quite as well, his basic religious and socioeconomic background is much the same as it has always been, although the institutions which have influenced him — the family, Church and school — have often been greatly affected by general cultural change."

Mulligan believes that those who are concerned about activism at Notre Dame are worrying needlessly. "The thing that really frightens me about our students is that they don't seem to care enough about most issues," he says.

"Most campus demonstrations, with the exception of the spring strike, have been small. The same 40 or 50 students seem to appear for everything — whether it's tutoring the disadvantaged or getting involved in community activities or campus problems."

And Notre Dame student history indicates that Mulligan is right. Until Cambodia the Notre Dame student seemed to have been more interested in securing dating and drinking privileges than in promoting the kind of student activism that focused on the country.

Dave Krashna, a native of Pittsburgh, Pa., and president of the Notre Dame student body, argues that there is "... a certain mentality at Notre Dame which could be called 'backward.' But that's only part of the reason students are a little behind the times here. Things are so ingrained at Notre Dame. They are so hard to change. That's the reason Notre Dame is just now beginning to catch up with what's happening around the country."

That kind of statement often strikes alumni as patronizing. Conceding a more knowledgeable student body than ever before, a 1947 alumnus who was on campus during the
"There were no buildings burned; no one was killed. The students were angry but they went about the business in a way that is very special to this campus."

Mike Hendryx put it this way: "There is a great deal of thinking and discussion here before action takes place. There is a rational approach to change. The result is that while we often confront situations after other institutions, we also learn a great deal from their mistakes."

Hendryx believes that there has been no violence at Notre Dame because student leadership has been good. "Our students think before they act," he says. "Of course, there is a small group of radical students here, but our student leaders have been very successful in leading the majority of the students in peaceful dissent."

Gaetano "Guy" DeSapio '71, publisher of the student daily, The Observer, believes that students are more active today because they are more aware. "Every night on national television," he says, "we see people dying of war, people oppressed by social and political bigotry and people starving in Biafra, Southeast Asia and America. We see human beings who need help. We extend a hand to help but the suffering is replaced coolly and calmly by the mist of springtime and a filter cigarette."
"Our students have seen more rapid change in their lifetime than the world has seen since creation. They have seen a president shot, men walk on the moon, nations literally destroyed by war, and it is amazing that their human circuits have not been burned up."

DeSapio believes that television is the main reason for much of the frustration of his generation. "We've seen a president assassinated before our eyes, people beaten in the streets and a presidential candidate, close to many of us, lying in his own blood."

Father Hesburgh commented: "Our students have seen more rapid change in their lifetime than the world has seen since creation. They have seen a president shot, men walk on the moon, nations literally destroyed by war, and it is amazing that their human circuits have not been burned up."

That many Notre Dame students were close to burning up their circuits was clearly illustrated by two articles that appeared in The Observer during the spring. Ed Ellis probably summed up the despair of many students when he observed: "I, a student, am upset, I'm sick and I'm tired and I'm angry. I'm sick of people being killed, be it at Kent State or Cambodia. I'm sick of those being killed, those doing the killing, those who canonize the dead while lifeless bodies get cold, and those who say, 'They deserved it.'

"I'm tired of the Vietnam war, because no war, no crusade, no struggle against any menace, Communist or otherwise, can be justified if the price of victory is the death of the nation. For in such a case will it be said that we conquered the world but destroyed our soul."

In another emotional editorial, Glen Corso, a conservative and campus news editor of The Observer, wondered about his generation's ability to lead Americans in the future. "What type of leaders will we become?" he asked. "Will we be the type of people that substitute emotion for reason or irrationality for logic? I think so. We seem all too ready to accept statements as facts, without questioning them as long as they come from people who agree with us. We readily reject the statements of people that don't agree with us with arrogance because of our stubborn pride... We seek to negate or circumvent laws that we don't agree with. We grow frustrated when the government doesn't instantly respond to our wishes and turn to mob action and violence in attempts to intimidate existing bodies into following the course of action dictated by the strident voices among us."

According to DeSapio, what this country needs is for "... people to become a little more human in their relations to one another — a little more loving. If the country is to become unified again, then that basis must be in understanding, respect and love."

Father Hesburgh agrees: "If we, young and old, can agree on those basic values that make human life worth living, then perhaps we can pool our efforts, young and old, to redeem the times. It still won't be easy, but it can be done."

While the events of the past year left many students feeling uneasy, it is also true that most students sincerely believe that Notre Dame will grow stronger as students become more involved. They think so, in many cases, because they honestly feel the University is different, that it is able to handle a crisis that could destroy lesser institutions.

Mike Hendryx agrees: "There is a great deal of love at Notre Dame. That's what religion is all about. It's caring for one another and most Notre Dame students have a great deal of respect and love for each other. Perhaps that's what makes Notre Dame unique — its people and their concern for each other."
May, 1969, was a memorable month for the frustrated punsters who line the rims of the nation's newspaper copy desks.

**Neighboring Dames to Join Notre Dame** said the Boston Advertiser.

*It's No Longer Notre Dameless* headlined the Detroit Free Press and *Schools' Ruling to Put the Dame in Notre Dame* is the way its competitor, the News, put it.

**There's Nothing Like Notre Dames** heralded Chicago's American.

The said New York Times was one of the few to resist the temptation. *Notre Dame, St. Mary's Begin Coeducation Program* it recorded...accurately.

Behind the May 4, 1969, announcement that the University and Saint Mary's College were taking initial steps to become substantially coeducational was a decade of change between two schools which had grown up side-by-side on either side of the Dixie Highway, a physical barrier less important historically, perhaps, than the psychological barrier existing between a "convent school" and a bastion of all-male higher education.

"Early in the 1950's," recalled Sister M. Alma Peter, C.S.C., acting president of Saint Mary's and a veteran of interinstitutional committees, "some of our girls started sneaking over to Notre Dame to sit in the back of such classes as Frank O'Malley's...but it was never on a formal basis."

Indeed, so firm was the belief in separate education, that a *South Bend Tribune* photo of the first "official" mixed class at Notre Dame drew the ire of religious superiors and bishops and led to a hiatus in cooperation between the two schools.

In November of 1964, Rev. Charles E. Sheedy of Notre Dame and Sister Mary Grace of Saint Mary's started to explore avenues of academic collaboration which, a year later, resulted in the first real breakthrough: a student exchange program.

"At that time, the word 'co-education' was still not recognized," said Sister Alma, "so the students coined the 'co-ex (co-exchange) program.'" The growth of this program from six SMC women and 15 ND men who cross-registered in the fall of 1965 to last spring's figures of 758 SMC students taking 1,229 Notre Dame classes and 1,100 ND students taking 1,447 Saint Mary's classes illustrates the rapid acceptance of coordinate education.

Indeed, the picture of monastic life at Notre Dame implied by the headlines of 1969 was unreal. If Rip Van Winkle were a Notre Dame alumnus who had awakened in 1970 after a 20-year dunes sleep, one thing would have struck him on his first trip to the campus: the presence of women. Women in classes, in the Huddle, in dining halls, in desegregated student section football stadium seats and (gasp!) on the golf course. Women visiting residence rooms, serving as editors on student publications, announcing records on WSND and endorsing the Women's Liberation movement before University trustees. Women cheerleaders, women speakers at activist rallies, women law students, women professors.

The barriers are falling one by one, accompanied by anecdotes, such as the one about the SMC professor who arrived at the opening session of his co-ex psychology professor who arrived at the opening session of his co-ex psychology class only to find 14 sad-eyed Notre Dame students — and no women at all. Or the female theologian who went over to the Athletic and Convocation Center to reserve her locker in the faculty sauna bath-exercise room facility and was rebuffed by an embarrassed attendant who explained that the letter should have specified male faculty.

Today, female locker room facilities are planned for both the Rockne pool and the ACC, and the campus golf course, as venerable an exclusively male enclave as one can find, has relaxed

By Richard W. Conklin
its anti-women bias. The first woman has been graduated from the Law School, and the Graduate School, long open to the distaff side, has 224 females seeking advanced degrees, with fewer and fewer of them nuns. There are 11 women on the teaching and research faculty, and women are starting to break into professional staff positions. Yet the admissions office answers several inquiries each week with the statement that Notre Dame does not directly admit women into its undergraduate program, and one can look in vain for a woman on the ND Board of Trustees.

"Why the change?" ask many who grew up in a tradition which believed men and women would get a better, more sensitive education apart from one another.

Father Sheedy is one who emphasizes a cultural change. "In American college education," he noted, "certain features formerly considered advantageous and enviable are now seen as anachronistic and out of phase. Replacing the old and cherished notion of an isolated, leisurely, elitist learning is the higher education of involvement, an outgrowth of social consciousness, the concern for equality of opportunity, and the breakdown of class separatism. The university becomes immersed in the city, concerned in the cares of urban culture. In this environment of diversity, the integration of the sexes is a normal and expected aspect, replacing separatism."

Sister Alma agrees: "In the contemporary economic, political and social situation, women very often have to meet the minds of men, and if they have been segregated for four years, they don't know how the other side thinks. And then, too, I think that the feminine mind and the masculine mind can each add a dimension to a discussion, make it more meaningful, enliven it and challenge it."

As one wag put it, "The handwriting is on the campus vanity mirror." The ranks of those institutions who are either going directly coeducational or cooperating in varying degrees with other sexually segregated schools are growing by leaps and bounds and include many first-rate schools who feel they are losing top applicants to coed institutions.

In addition to the fact that the universities — society's canary in the coal mine — are the first to feel the brunt of cultural change of the type outlined by Father Sheedy, there are other reasons, including financial benefits and recruiting advantages, which often go with coeducation. Another factor has been the slow breakdown of one of male chauvinism's most cherished myths: the intellectual inferiority of women. To the 4.5 per cent of tenured ND faculty respondents to a Student Government survey who indicated such a belief, survey authors offered statistics which showed no significant difference between men and women on SAT tests or National Merit Scholarship competition and, in the case of the Harvard-Radcliffe class of 1967, revealed that women achieved a significantly higher percentage of academic honors than men.

After the initial co-exchange program step taken in 1965, a coordinating committee composed of ND-SMC faculty and administrators, established two years later, evolved additional patterns. A cooperative department of speech and drama was established, but a setback in interinstitutional cooperation came with the removal of Sister Mary Grace as president of SMC in November, 1967. Her well-publicized charges that she was being replaced because she opposed a "quick merger" with ND drew a sharp rebuttal from her religious superiors but created an atmosphere of distrust, particularly
among SMC faculty members concerned about their fate in any ND "take-over" of the smaller teaching-oriented liberal arts college. A joint resolution passed by the trustees of both institutions in December of 1967 pledged that the two schools would remain "autonomous but cooperating institutions" and took some of the edge off the tense situation which greeted SMC’s new president, the Rev. (later Msgr.) John J. McGrath, as 1968 started.

In March of 1968, the Notre Dame-Saint Mary’s coeducation story took a turn toward the cluster college concept. The governing bodies of ND, SMC and Barat College (a Lake Forest, Ill., Catholic women’s college) decided to explore the possibility of moving Barat to a site on the Notre Dame campus and creating an educational commune. By December the plan had fallen through, reportedly because Barat had difficulties selling its suburban Chicago campus.

Efforts then intensified to realize the potential present in the coordinate educational approach. A Coordinating Committee headed by Rev. John E. Walsh, C.S.C., then vice president for academic affairs at ND, and Dr. Jack Detzler, executive vice president of SMC, conducted a yearlong study which culminated in the 1969 announcement which stirred the puns in the nation’s dailies.

The Coordinating Committee’s "Statement of Principles," adopted by the trustees of both institutions, staked out the immediate future of coordinate education between the schools. It expanded the co-ex program and decreed that required freshman liberal arts courses would be mixed 50-50 and taught on both campuses. It endorsed identical academic calendars, an integrated class schedule, a common grading system and harmonized examination program. For the first time, campus social life, a subject of increasing criticism from students of both schools, was brought into the picture with the endorsement of reciprocal dining privileges and integrated seating at athletic events.

The spectre of “merger,” however, still dogged the footsteps of inter-institutional planning, and Father Hesburgh and Msgr. McGrath felt it necessary to issue a joint statement which said, “There is not now and never has been any intention of merging Saint Mary’s College with the University of Notre Dame. The Board of Trustees, the administration and faculty of both institutions have expressed repeatedly their intentions of maintaining the autonomy of each institution. The recent announcement of coeducation in some classes should be considered only as a step to provide greater opportunity for the education of students on both campuses.”

The statement cited the cooperative department of speech and drama; a division of responsibility which gave SMC all undergraduate work in education and ND graduate study in that field; the exchange program in theology; joint registration, and increased cooperation in the area of student services. “The Notre Dame-Saint Mary’s plan is not duplicating the Harvard-Radcliffe experience, or the Columbia-Barnard experience, or the Claremont Cluster College experience,” the statement concluded. “The University of Notre Dame is not following in the footsteps of Princeton or Yale; Saint Mary’s College is not following in the footsteps of Vassar or Xavier College. As the students would express it, ‘We are doing our own thing.’”

The ND students, however, were not about to settle for that description of their sentiments. Periodic complaints about the pace of coeducational planning in the student news media culminated in a Student Government report on coeducation distributed in January, 1970. The report consisted of two parts. Part one dismissed coordinate
education in favor of an approach in which Notre Dame would "become a coeducational institution, hopefully in such a way as to include Saint Mary's as part of the total coeducational community." In other words, the report urged both direct admission of women undergraduates to ND and some sort of reciprocal academic arrangement with SMC. The second part of the report reproduced Princeton's extensive (and very valuable) study of the "desirability and feasibility" of coeducation for that university. In adapting Princeton's conclusions to Notre Dame's situation, however, the report disregarded the fact that when Princeton talked about coordinate education, it was talking about creating *from scratch* a separate but equal women's college, while Notre Dame faced a situation in which an *existing* women's college was an undeniable factor in any decision.

The Student Government report, however, did call attention to a major shortcoming in previous ND-SMC cooperation — the lack of a clear-cut, agreed-upon goal of interinstitutional efforts. It argued for a study similar to the one done at Princeton, and three months later a historic joint meeting of the boards of trustees of SMC and ND met at Key Biscayne, Florida, and wrestled with precisely this issue. Their statement, issued last April, provided the third major step in the quest for a coeducational rapprochement between two institutions. The trustees announced the retention of a consultant team to study the direction of future collaboration between the two schools. Dr. Rosemary Park, former president of Barnard College in New York City, and Dr. Lewis B. Mayhew, professor of education at Stanford University, will report to the trustees no later than next Dec. 31, and their study is expected to set the stage for a decision on the eventual goal of ND-SMC collaboration.

The committee also:

- Approved in principle the current sharing of facilities and resources, including the co-ex program.
- Set guidelines for faculty recruitment which called for consultation between "departments of either institution basically concerned with undergraduate instruction" before making appointments.
- Cited the combined Notre Dame-Saint Mary's Speech and Drama department as the model for merged departments, with one institution having primary jurisdiction and overall control of faculty and budgets.
- Said standards of faculty competence and salaries for both institutions would be "comparable," while emphasizing that the Saint Mary's faculty "is primarily committed to undergraduate education."
- Urged departments to cooperate closely in planning course offerings with the aim of economizing in the use of staff and eliminating unnecessary small classes at both schools.
- Made available to Saint Mary's the services of graduate student teaching assistants from Notre Dame.

"Notre Dame," said Father Sheedy, "is faced with two choices: 1) going directly coed, or 2) adopting a coordinate arrangement with SMC. No. 1 has difficulties by affecting many aspects of ND structure. No. 2 is now going on through co-ex but has difficulties because of the lack of a general overall plan and consequent difficulty of activating various sectors of planning and decision-making."

Sister Alma believes that "there are many areas in which we can cooperate. You have a purchasing department over there; we have a purchasing department over here. And while it is true that many of
our chemical and science equipment are purchased through your science department, that is merely an arrangement made between departments. It would seem to me that purchasing on a large order could be taken care of. There might even be a (joint) personnel office, and our placement departments have been working much closer together than they have in the past. Health services and psychological testing are also working together. As for academic areas, I would certainly see where there are still some academic departments — and, again, I know this has to go through all kinds of academic committees in order to reach any kind of decision — that are small in terms of majors on each campus. It does seem a complete waste of manpower and money to have six majors taught over here and six over there when a class of 12 would be much more enlivening for the teacher and certainly much better for the students."

Sister Alma feels that the SMC faculty is more receptive to closer collaboration with Notre Dame than at any time in the recent past. She divides SMC student sentiments into upperclasswomen, who favor cooperation but oppose merger, and freshmen and sophomores, who are not as concerned about preserving SMC traditions with which they have had only limited contact. Father Sheedy believes there is more pressure for coeducation among Notre Dame students. Neither he nor Sister Alma believes there is significant opposition among alumni or alumnæ.

Faculty parity remains a problem, although Sister Alma thinks the interinstitutional consultation on hiring will eventually reduce its importance.

The question of economic benefits is not clear. While the combination of some administrative and academic functions should result in savings, there are higher costs to be anticipated in any closer collaboration. Money is an omnipresent concern. One might snicker at reciprocal dining arrangements that become stymied because students on one campus get two glasses of milk and those on the other only one, but there is no denying the long shadows of departmental budgets. No money has yet accompanied students in the exchanges between SMC and ND, and one of the main problems in this area is the disparity between the cost per credit-hour between ND (where the undergraduate program, as is the case at most universities, subsidizes the Graduate School) and SMC.

There are also many problems inherent in upsetting what Father Sheedy calls the "ecological balance" of ND's educational endeavor. "For example," Father Sheedy pointed out, "our faculty is keyed to a predictable input of men's admissions. Women will destroy that predictability by concentrating mainly in the liberal arts. Over and above that kind of academic dislocation are adjustments to be made in terms of residences, sports, and so on. Women simply do not live the same as men, and to the extent they do not, it will cost money to accommodate them."

What kind of institutional priority does settling the coeducation issue have? "It's a top priority with us," said Sister Alma. Father Sheedy is sure of one thing: if the two institutions do not plan together "the movement of events will cause more and more action to take place and will bring about decisions by the route of necessity."

That "route of necessity" was mapped out somewhat by Father Hesburgh in an address given at Saint Mary's 125th anniversary convocation. "I am intrigued," he said, "by the thought that between us we might create a total educational opportunity that will be greater than the two separate opportunities that have existed so far. I believe that this can be accomplished without submerging Saint Mary's or bankrupting Notre Dame or lowering the academic standards of either school."
Dr. Milton Burton does not go in for "lukewarm." He has only passionate opinions about the faculty and staff working under him at Notre Dame's Radiation Laboratory, and only fiercely held views toward any topic, article or political theory remotely bearing on science. In turn, none of his associates is neutral about him.

As chief administrator, fund-raiser, editor and political infighter for the Rad Lab, Burton has won the respect, if not the affection, of most of his colleagues. Dr. Glenn T. Seaborg, chairman of the Atomic Energy Commission, called his scientific contributions "profound and lasting." A Notre Dame administrator pointed to the modern beautifully equipped Radiation Building as a monument to Burton's persuasive skill, political savvy and perseverance. Most faculty associated with the Lab are grateful for his skill in gaining funds for their research projects.

While professional admiration for Burton runs high, his associates are deeply divided in characterizing his personality. Many call him warm, generous and helpful — but there are some who have been deeply offended by his sharp tongue and impatient manner; who question his firm leadership as "dictatorial," and who characterize his manner as pompous and self-seeking.

Spanning these extremes is a complex, brilliant man of tremendous energy who cares too much about too many topics. Whether railing against the prevailing social mood of anti-intellectualism and desertion of science or warmly praising a faculty fellow for his research efforts, Burton is consistently devoted to science and the truths uncovered by research. He has spent a lifetime unearthing and protecting little truths about how the world works, and nurturing the process of unearthing more. He has called the process "the scientist's approach to God," and places a value on it above good. To him, science is the raw material, the hard facts, on which any moral system must be based — the raw material which gives "good" and "bad" their very meaning.

From this basic belief flow a variety of strongly held opinions on politics, education, student radicals, liberal arts, technology, war and literature. "Many radicals do not distinguish between what they know and what they guess," he charges. "As a result, their demands are worthless, with no basis in fact." (But his approach to dissent remains imaginative and flexible. While the University summoned police to prevent the showing of a pornographic film, Burton was quietly looking for a way to turn off the electricity.)

He believes that "Notre Dame has the opportunity to be truly great, if it limits its size and the scope of its programs." Faculty who "get together only to improve their lot" disgust him. Perhaps these strong opinions earn Burton the reputation of a dictator, for as one associate puts it, "he doesn't often react in a restrained way." Also, many find it hard to keep pace with his tremendous energy and quick mind, and Burton has little patience for those who can't keep up. "I was 42 years old," he said earnestly, "before I realized people weren't just making excuses when they said they were tired."

While most scientists remain aloof and uncomfortable with journalists, Burton is articulate, outgoing and incredibly well-read. He definitely likes favorable publicity, a highly suspect quirk in a scientific community dedicated to more restrained recognition. But he believes strongly that researchers

By Jean Horiszny
have to improve their public image or lose out in the competition for federal support. And publicity for Milton Burton is publicity for the Rad Lab is publicity for pure science.

After gaining a Ph.D. from New York University in 1925, Burton entered industry. Later, he and a student were the first to trace a photochemical reaction through its entire course. Recalling that triumph somewhat wistfully now, he sighed, "All the things that were so wonderful then, anyone can do now."

In 1942, Burton joined the wartime "Metallurgical Laboratory" in Chicago, a secret, top-priority research project dedicated to the development and use of atomic energy. He headed the photochemical group, a code name that, he said, "confused the members of the group at least as much as it would have confused the enemy." To straighten out the confusion, Burton renamed his section the radiation chemistry group, incidentally, naming a new field and earning himself the affectionate title "godfather of radiation chemistry." Known also for his work on the chemistry of the electric discharge, Burton has always been interested in studying reactions occurring within very short time spans after the application of light or radiation.

Even now, he fairly hops in wonderment as he explains experiments which can measure chemical reactions occurring in nanoseconds and picoseconds—in billionths and trillionths of a second. Light, which travels 186,000 miles per second, will travel less than a foot in a nanosecond, and a hundredth of an inch in a picosecond.

"Less than an inch," he repeats in amazement as he holds his hands apart demonstrates, "that far." Indeed, the mind that can work in a world where light travels less than an inch must have a taste for risks. It is a world of the mind as far away as the moon, and exploring it requires its own kind of courage. But who can understand and share the small piece of truth carefully brushed off by the daring effort? He shakes his head, knowing his visitor does not comprehend.

Now, as director of the world-renowned Radiation Laboratory, Burton sees himself as creating an environment for others to pursue pure science unmolested by the forms, secretarial chores, proposal-writing and faulty equipment that plague most researchers. "They're very kind to scientists over there," a chemist affiliated with the lab explained. "They know we aren't much for forms and rules, and try to keep the bureaucracy to a minimum."

Burton looks back on his research, administrative innovations, friendships and successes with intense satisfaction. He is most happy that he has built something that will last after him—the Radiation Laboratory and its research. But at 68, he is saddened and bewildered by a new generation which suggests that it would be better not to know about atomic energy, or better not to learn the secrets of the gene, because of possible frightening applications. Burton himself was among those who opposed using the atomic bomb, and agrees that certain uses of scientific knowledge should be banned. But to refuse to know — he cannot begin to understand that. To Burton, this is moral cowardice and downright stupidity.
"Insect" is a term of contempt among most humans. After all, the creepies and crawlies deliver painful and annoying bites, spread disease, and destroy the crops and buildings man labors to protect.

But with the recent emphasis on ecology, many have come to realize that these tiny animals also provide valuable food for the soaring birds and shining fish. Insects have served the cause of knowledge, providing most of what man knows about genetics and enzyme systems. In addition, some people even believe that they are good-looking, hard-working, and as much a part of the scheme of things as man himself. They claim that if man blows himself off the face of the earth, his successor will be an insect.

The insects pictured here are (with one exception) unsung members of the Notre Dame community, either serving in the laboratory or dwelling quietly on the campus. Their photographer is Fred Nijhout, a senior in biology from Curacao. Fred has a scholarship to Harvard this fall, and will work towards a Ph.D. in insect physiology.

As the vampire of the insect world, mosquitoes spread such diseases as malaria, yellow fever and elephantiasis. In the Vector Biology Laboratory, a new mosquito (top, right) with an altered genetic structure has been developed by Dr. Karamjit Rai, Notre Dame professor of biology, which may wipe out infestations of the dreaded Aedes mosquitoes in tropical areas. Males of the new breed mate readily with normal females—but 80 per cent of these matings produce no offspring. Of the offspring produced, about 75 per cent of the males will carry the sterility factor, passing on this fatal flaw through several generations until the population is wiped out.

Chagas disease, an incurable infection which renders about three million people in Central and South America weak and sick for life, is spread by this kissing bug (bottom, right). Dr. Robert D. Goodfellow, assistant professor of biology at Notre Dame, is looking for biochemical "weak spots" in its life-style, seeking means of controlling its numbers. The blood-sucking kissing bug is almost immune to conventional spraying methods.

It's their world and welcome to it
The bee has a "language," and can be quite explicit in pointing the location of food to others in the hive. Dr. Harald Esch, Notre Dame professor of biology, is studying this peculiar language, seeking to understand the motions, sounds and postures which the bee uses to communicate with its fellows. One important aspect is a "dance," in which the bees indicate the direction and distance of food. Esch is now trying to discover the part that sound plays in the language, how the sound is produced, and how it is "heard," for bees have no recognizable ears.

The fruit fly (Drosophila) has taught man most of what he knows about genetics. Dr. Harvey Bender, professor of biology, is extending this knowledge, studying the effects of "extra" chromosomes on the growth and development of the flies. He has also introduced the fly's exotic cousin to the laboratory world—the kelp fly. In the wild, this fly eats only decaying kelp which it finds along the east coast. Bender and his students have developed the first synthetic diet for the kelp fly, enabling it to thrive in any lab—high-protein baby food, Instant Ocean, corn meal and gelatin.

man cannot even make war with the efficiency and generalship of an army of warrior ants and he has done little else but make war for centuries make war and wonder how he is going to pay for it

one thing that shows that insects are superior to men is the fact that insects run their affairs without political campaigns elections and so forth

in a million years or more many may learn the simple lore of how the bees are organized and why the ants are civilized
a louse i
used to know
told me that
millionaires and
bums tasted
about alike
to him

germs are very
objectionable to men
but a germ
thinks of a man
as only the swamp
in which
he has to live

Damsel fly (top)
A flower fly
An ant, walking with its abdomen
curved forward

Cholesterol—the plate-like chemical
which can clog arteries and lead to
heart attacks—is produced in this
flesh fly as well as in man. The fly
(bottom), like humans, uses small
amounts of cholesterol as a basis for
some important hormones. To find
out how the chemical is produced
and controlled, Dr. Robert D.
Goodfellow, Notre Dame assistant
professor of biology, has been
studying the enzyme system of this
fly. He hopes to identify chemicals
which can regulate cholesterol
production, offering new hope to
victims of hardening of the arteries.
In addition, the regulator might be
used to block cholesterol production
in insects, upsetting their metabolism
and limiting their numbers.
I have noticed that when chickens quit quarrelling over their food they often find that there is enough for all of them. I wonder if it might not be the same way with the human race.

as far as personal beauty is concerned who ever saw man woman or child who could compete with a butterfly.

From the book *Archie's Life of Mehitabel* by Don Marquis, Copyright 1933 by Doubleday & Company, Inc. Published by Doubleday & Company, Inc.
Rev. James T. Burtchaell, C.S.C., chairman of the department of theology, has been named to the newly created position of provost at Notre Dame. The new office, established recently by the University’s trustees, replaces the office of the vice-president of academic affairs.

Rev. Edmund P. Joyce, C.S.C., will continue as executive vice-president of Notre Dame, a post he has held for 18 years.

Father Burtchaell is responsible for the total academic enterprise and he indirectly supervises student affairs. He is a fellow and trustee of the University and acting president in the absence of the president.

The new assignment of Rev. John E. Walsh, C.S.C., vice-president for academic affairs since 1965, will be announced later, Father Hesburgh said. Rev. Ferdinand L. Brown, C.S.C., who has been serving as acting vice-president for academic affairs while Father Walsh is in residence at the University of Hawaii’s East-West Center on a Danforth Foundation grant, is associate provost.

Father Hesburgh noted “If this dual subdivision of presidential responsibility works, the office of the presidency should be relieved of some of the present pressures.”

In a letter to Notre Dame’s faculty and administration, Father Hesburgh commented that “there will be further changes by this time next year, but, for the moment, these changes in structure and personnel should respond effectively to some of the real questions raised by the chancellor-president discussion of recent months.”

Father Burtchaell, 36, is a native of Portland, Ore., where he attended Columbia Preparatory School. He joined the Notre Dame faculty in 1966 and was appointed chairman of the theology department in 1968. Currently an associate professor, Father Burtchaell has been very active in efforts to define the role of the Christian university in today’s society. In 1968 he chaired a group that discussed that subject during a five-day session.

After the meeting, the group issued a statement which reveals some of Father Burtchaell’s thinking on Christian higher education. The group noted that “Colleges today should aim to educate men and women who will honestly criticize their churches and reform them in ways that will reflect not only the authentic traditions of the past, but the demands of the present, and hopes for the future.”

The report suggested that “It is on the Christian campus that ecumenism should most quickly come to full term . . . . The colleges must lead the way out of this . . . . Students—indeed, the entire academic community—have little patience with sectarian Christianity. They sense how tiresome much of our denominational worship has become, and they should be able to create celebrations out of various traditions in which all can share.”

The report also contends that “if faculty and administration contribute only their good wishes, then the college is less than Christian. Social service, no less than scholarly study, should be a joint work of the entire collegiate community.”

The report concludes by noting that “Given boldness, imagination, and courage, the Christian colleges can use their heritage and resources to fulfill radically new responsibilities in this time of new creation.”

Father Burtchaell was ordained a priest in the Congregation of Holy Cross in 1960; he did his undergraduate work at Notre Dame in philosophy. He holds theology degrees from Rome’s Gregorian University and the Catholic University of America, and he received his bachelor’s degree and licentiate in Sacred Scripture from the Pontifical Biblical Commission following research at the Ecole Biblique et Archeologique Francaise in Jerusalem. From 1963 to 1966, he studied at Cambridge University in England, earning a Ph.D. in Divinity.
Vice Presidents

Two vice-presidents, one of whom will occupy a new position in the institution's administration, were appointed in July.

Rev. Thomas E. Blantz, C.S.C., University archivist and assistant professor of history, was named vice-president for student affairs, succeeding Rev. Charles I. McCarragher, C.S.C. Father Hesburgh, also announced the appointment of his special assistant, Philip J. Faccenda, to the newly created post of vice-president and general counsel.

Father Blantz, 36, holds bachelor's and master's degrees from Notre Dame and two theology degrees from the Gregorian University in Rome. His doctorate in American history was received in 1968 from Columbia University. A native of Massillon, Ohio, he entered the Holy Cross novitiate in 1952 and was ordained in 1960. He joined the Notre Dame faculty in 1966 and was appointed archivist in 1969. Most recently, he has also served as rector of Zahm Hall.

Faccenda, 40, was appointed special assistant to Father Hesburgh and assistant secretary of the Board of Trustees and of the Fellows of the University shortly after Notre Dame's governance was reorganized in July of 1967. A 1952 Notre Dame mechanical engineering graduate who took his law degree five years later at Chicago's Loyola University, he practiced with a Chicago law firm bearing his name and was prominent in Notre Dame alumni affairs. He served as president of the Notre Dame Alumni Association in 1964, after serving as president of the Notre Dame Club of Chicago in 1959, and was president of the Notre Dame Law Association in 1967. Faccenda is chairman of the board of directors of four domestic corporations and is a member of the Illinois, Chicago, Indiana and American bar associations. He is on the board of directors of the United Community Services of St. Joseph County, the United Fund of St. Joseph County and the Community Coalition of St. Joseph County, as well as a member of the Serra and Rotary Clubs and of the National Association of College and University Attorneys.

Selective conscientious objection

Thirty members of the University's department of theology issued a statement in June endorsing selective conscientious objection. Signers include Father Hesburgh and represent all but one member of the department.

At present, federal law requires opposition to "war in any form" in order for classification as a conscientious objector, but many churchmen believe it ought to be revised to allow for conscientious objection to a particular war. The American Catholic bishops endorsed such a revision in a statement issued in November, 1968.

"A Christian, applying honestly the 'just war' standards may properly conclude that he cannot participate in the kind of war he now faces," the Notre Dame statement reads. "Indeed, sober attention to the reality of contemporary war, its goals and methods, makes its moral justification increasingly dubious."

In addition to Father Hesburgh, signers included Rev. Charles E. Sheedy, C.S.C., dean of theology and theological institutes; Rev. James T. Burtchaell, C.S.C., provost of the University; Dr. Josephine Massingberd Ford and Rev. John L. McKenzie, scripture scholars; Rev. Louis J. Putz, C.S.C., rector of Moreau Seminary; Rev. Albert L. Schlitzer, C.S.C., past department chairman; Elliot D. Rosenstock, a South Bend rabbi who teaches at Notre Dame, and Dr. John H. Yoder, a Mennonite professor.
The Catholic University

Father Hesburgh writing in a preface to The Catholic University: A Modern Appraisal says, "The total situation of the Catholic university in the world today is quite ambiguous, with an ambiguity born of many new opportunities and as many new pressures that could, if not successfully countered, easily push our institutions into irrelevancy, if not extinction."

Noting that the history of Catholic higher education "somewhat parallels the history of theology," Father Hesburgh points out that the contemporary university is a product of a secular society which, far from granting theology the status of "queen of the sciences" it enjoyed in the Middle Ages, is suspicious of its basic intellectual credentials.

"If theology is to reenter the university, even the great Catholic university, it will only be accepted as a true university discipline if it proves itself to be relevant to the whole scene of knowledge, and if it operates under the same kinds of university conditions of freedom and autonomy as the other disciplines do," Father Hesburgh says.

The Catholic university must first be a university, according to Father Hesburgh. "We have often created," he says, "a Catholic something that lacked the essentials of what the secular university world considers necessary for a university—a combination of many strong, free and autonomous faculties. If, in addition, there was the added defect of no strong, vital and creative theological faculty within it, the so-called Catholic university was neither a university nor Catholic."

Theology's dialogue with other disciplines and its attempt to bring to bear its particular insight upon the panoply of human problems are not tasks "for amateurs, or dilettantes, nor for second-rate scholars, nor institutions less than first class," Notre Dame's president writes. "And it is not something that can be accomplished in the face of arbitrary controls from outside the university's professional community of researchers and scholars."


Curriculum revision

Increased flexibility and more student control in curriculum, a personalized approach to education, and the dovetailing of living and learning experiences—these are the major threads in a report by the University's curriculum revision committee.

Recently approved by the University's Academic Council, the report was two years in the making and involved students as voting committee members.

The pattern which runs throughout the committee's study is evident in what probably is the most far-reaching of the group's 11 recommendations—the proposal for a residential, coeducational Notre Dame-Saint Mary's College experimental program.

The committee received three separate proposals for an experimental college during its deliberations, and in the end it recommended the appointment of a coordinator and an advisory board to plan "a residential, coeducational, cross-college program in the sophomore year to experiment broadly in innovative academic methodology and to test new educational departures." The earliest possible date mentioned for implementation was the fall of 1971.

In other instances of increased cooperation with Saint Mary's, the committee adopted a common schedule and grading system as well
as a new, joint academic calendar which omits the "lame duck" session between the end of Christmas vacation and the end of the first semester.

In many provisions, the committee placed increased freedom and responsibility on the student to plan his own education, while at the same time encouraging more active faculty counseling, especially in the transitional sophomore year when students leave a Freshman Year Program and have yet to establish a firm footing in a major field.

In the College of Arts and Letters, for example, there are Freshman Seminars, which emphasize problem- and theme-oriented courses and involve intensive reading and writing. And any group of 15 students may petition for a credit course on any subject for which they prepare a bibliography, secure a teacher from the regular faculty and have the approval of his department. In the area of required courses, the University-wide 12 hours in theology and philosophy were halved while a 3-hour fine arts requirement was added in the College of Arts and Letters. The reduction of the theology and philosophy requirements was in the nature of a consolidation move, attempting to achieve higher levels of quality by reducing the departmental commitments in total number of hours offered. The fine arts requirement grew out of student complaints about an insensitivity to aesthetics on campus.

Other Notre Dame colleges also revamped their curricula with an eye toward innovative and student-centered education. One recommendation of the committee specifically endorsed "increasing diversity of academic programs."

Other major items in the curriculum revision included:

- Community Involvement and Work-Study Programs. The report favored increased community involvement both on the University level and on that of the individual student. The possibility of alternating periods of study with periods of work was stressed, with detailed programs left up to individual colleges.

- Educational Media. The yoking of contemporary educational media with individualized education was given a high priority, with the emphasis on use of media to improve the quality of teaching, not to increase the quantity of learners.

- International Study. Notre Dame's foreign study programs—which now embrace Innsbruck, Austria; Angers, France; Tokyo, Japan, and Anahuac, Mexico—received a solid vote of confidence and a mandate for expansion to include students from all colleges.

- Learning-Living Environment. The report stresses the need of imaginative approaches to the residence hall as a learning environment, including the scheduling of seminar discussions in dormitories.

- Student Participation. The report backs participation of students "in appropriate academic committees and councils," excluding a few, such as those on admissions, on faculty appointments and promotions, and on student scholarships and fellowships.

- Pass-Fail Option. Juniors and seniors may now elect to take one nonmajor, elective course each semester on a pass-fail basis. "Any curriculum," the report commented, "is a changing and partial arrangement. Probably the most successful curriculum is the one which . . . has motivated its students to a high proportion of independent study."
“What this country needs is for people to become a little more human in their relations to one another—a little more compassionate—a little more understanding—a little more loving.”